K9YA Telegraph

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Premax Vertical Antenna

The Antenna That Went to War

Philip Cala-Lazar, K9PL

It was as one of a group of hams inventorying a silent key's estate that I first saw a Premax vertical antenna in the flesh. Previously, I'd glimpsed Premax antennas in vintage amateur radio magazine ads and in the advertising

sections of the Antenna Handbook and The Radio Amateur's Handbook.

Now here was an authentic bit of ham radio history—a ground-mounted 20-meter version—installed in a corner of a postage stamp-size backyard. It was immediately recognizable thanks to the base insulator's husky presence and unique appearance that nothing in today's marketplace resembles. Despite decades of exposure to northern Illinois's weather extremes it appeared no worse for the punishment.

A full-page Premax advertisement in the 1939 edition of the *Antenna Handbook* noted Premax telescoping vertical radiators were available in "High Tensile Copper Nickel Steel (Style M), Aluminum (Style AM) and Monel (Style MM for marine and commercial)." Telescoping sections were secured "by means of special Premax Locking Clamps." Included in the price for these radiators was "mast, insulator and full instructions for erecting and feeding." How much would these masterpieces set you back in 2009 dollars (in parentheses) based on the Consumer Price Index?

Radiator VR-13–20 meter steel mast 136- with insulator 136-P; weighs 29 lbs. NET \$16.95 (\$207).

Aluminum version of same weighing only 20 lbs. was priced at \$34.50 (\$421).

Price of the three-section, 24' 8 1/2" Monel metal mast only, no insulator included, was \$49.50 (\$603) and weighed eight pounds.

Cost of the Style 136 Premax insulator alone [*Lapp Heavy Duty construction, compression rating up to 10,000 lbs.*] was \$8.10 (\$98.70) and weighed seven pounds.

Premax's light-duty Style 318-P insulator was \$3 (\$36.60) and weighed four pounds.

Premax antennas were featured in a November 1940

"...authentic bit of ham radio history..." *Popular Mechanics* article, "Vertical Antenna Installations." The article noted the availability of masts up to 35 feet in length and, "[the] 'Premax' base insulator [is] of the same general construction as the large-footing insulators used on vertical towers of 800-ft. height." A rather startling installation is also pictured; it is "...a 34-ft. steel vertical on a mobile truck unit at Evansville, Ind."

Shown is radio station WGBF's panel truck with its antenna running board-mounted using the heavyduty 136-P base.

The Premax vertical antenna in its several iterations was a product of the Chisholm-Ryder Company of Niagara Falls, N.Y. Chisholm-Ryder, according to its

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Wired Love Sounds From a Distant "C"

Ella Cheever Thayer



The K9YA Telegraph is pleased to present Chapter One of Wired Love: A Romance of Dots and Dashes. This 19th century novel takes a peak into the lives of commercial telegraphers. A cyber romance ensues on the wire—long before the dream of an Internet.

Just a noise, that is all. But a very significant noise to Miss Nathalie Rogers, or Nattie, as she was usually abbreviated; a noise that caused her to lay aside her book, and jump up hastily, exclaiming, with a ges-

ture of impatience:-

"Somebody always 'calls' me in the middle of every entertaining chapter!"

For that noise, that little clatter, like, and yet too irregular to be the ticking of a clock, expressed to Nattie these four mystic letters:—

"B m — X n;"

which same four mystic letters, interpreted meant that the name, or, to use the technical word, "call," of the telegraph office over which she was present sole presiding genius, was "B m," and that "B m" was

wanted by another office on the wire, designated as "X n."

A little, out-of-the-way, country office, some fifty miles down the line, was "X n," her readiness to receive any communications therefrom, she was conscious of holding in some slight contempt the possible abilities of the human portion of its machinery.

For who but an operator very green in the profession would stay there?

Consequently, she was quite unprepared for the velocity with which the telegraph alphabet of sounds in dots and dashes rattled over the instrument, appropriately termed a "sounder," upon which messages are received, and found herself wholly unable to write down the words as fast as they came. "Dear me!" she thought, rather nervously, "the country is certainly ahead of the city this time! I wonder if this smart operator is a lady or gentleman!"

And, notwithstanding all her efforts, she was compelled to "break"—that is, open her "key," thereby breaking the circuit, and interpreting "X n" with the request,

"Please repeat."

"X n" took the interruption very good-naturedly—it was after dinner—and obeyed without expressing any impatience.

But, alas! Nattie was even now unable to keep up with this too expert individual of uncertain sex, and was obliged again to "break," with the humiliating petition,

"Please send slower!"

"Oh! responded "X n."

For a small one, "Oh!" is a very expressive word. But whether this particular one signified impatience, or, as



Nattie sensitively feared, contempt for her abilities, she could not tell. But certain it was that "X n" sent along the letters now in such a slow, funeral procession that she was driven half frantic with nervousness in the attempt to piece them together into words. They had not proceeded far, however before a small thin voice fell upon the ears of the agitated Nattie.

"Are you taking a message now?" it asked.

Nattie glanced over her shoulder, and saw a sharp inquisitive nose, a green veil, a pair of eye glasses, and a strained smile, sticking through her little window.

Nodding a hasty answer to the question, she wrote down another word of the message, that she had been able to catch, notwithstanding the interruption. As she did so the voice again queried,

"Do you take them entirely by sound?"

With such a determined endeavor not to "break," Nattie replied only with a frown. But fate was evidently against her establishing a reputation for being a good operator with "X n."

"Here, please attend to this quick!" exclaimed a new voice, and a tall gentleman pounded impatiently on the shelf



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www.k9ya.org telegraph@k9ya.org outside the little window with one hand, and with the other held forth a message.

With despair in her heart, once more Nattie interrupted "X n," took the impatient gentleman's message, studied out its illegible characters, and changed a bill, the owner of the nose looking on attentively meanwhile; this done, she bade the really much-abused "X n" to proceed, or in telegraphic terms, to

"G. A.— the."

"G. A." being the telegraphic abbreviation for "go ahead," and "the" the last word she had received of the message.

And this time not even the fact of its being after dinner restrained "X n's" feelings, and "X n" made the sarcastic inquiry,

"Had you not better go home and send down some one who is capable of receiving this message?"

Now it would seem as if two persons sixty or seventy miles apart might severally fly into a rage and nurse their wrath comfortably without particularly annoying each other at the moment. But not under present conditions; and Nattie turned red and bit her nails excitedly under the displeasure of the distant person of unknown sex, at "X n." But no instrument had yet been invented by which she could see the expression on the face of this operator at "X n," as she retorted, and her fingers formed the letters very sharply;

"Do you think it will help the matter at all for you to make a display of your charming disposition? G. A.—the —."

"I am happy to be able to return the compliment implied!" was "X n's" preface to the continuation of the message.

And now indeed Nattie might have recovered some of her fallen glories, being angry enough to be fiercely determined, had not the owner of the nose again made her presence manifest by the sudden question:

"Do you have a different sound for every word, or syllable, or what?"

And, turning quickly around to scowl this persevering questioner into silence, Nattie's elbow hit and knocked over the inkstand, its contents pouring over her hands, dress, the desk and floor, and proving beyond a doubt, as it descended, the truth of its label—

"Superior Black Ink!"

And then, sale for the clatter of the "sounder," there was silence.

For a moment Nattie gazed blankly at her besmeared hands and ruined dress, at the "sounder," and at the owner of the nose, who returned her look with that expression of serene amusement often noticeable in those who contemplate from afar the mishaps of their fellow beings; then with the courage of despair, she for the fourth time "broke" "X n," saying, with inky impression on the instrument,

"Excuse me, but you will have to wait! I am all ink, and I am being cross-examined!"

Having thus delivered herself, she turned a delib-

erately deaf ear to "X n's" response, which, judging from the way the movable portion of the "sounder" danced, was emphatic.

"A little new milk will take that out!" complacently said the owner of the nose, watching Nattie's efforts to remove the ink from her dress with blotting-paper.

"Unfortunately I do not keep a cow here!" Nattie replied, tartly.

Not quite polite in Nattie, this. But do not the circumstances

plead strongly in her excuse? For, remember, she was not one of those impossible, angelic young ladies of whom we read, but one of the ordinary human beings we meet every day.

> The owner of the nose, however, was not charitable, and drew herself up loftily, as she said in imperative accents,

> "You did not answer my question! Do you have to learn the sound of each letter so as to distinguish them from each other?"

> Nattie constrained herself to reply, very shortly,

"Can you take a message and talk to me at the same time?" pursued the investigator.

"No!" was Nattie's emphatic answer, as she looked ruefully at her dress.

"But your instrument there is going it now. Ain't they sending you a message?" went on the relentless owner of the nose.

At this Nattie turned her attention a moment to what was being done "on the wire," and breathed a sigh of relief. For "X n" had given place to another office, and she replied, "No! Some office on the wire is sending to some other office."

The nose elevated itself in surprise.





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"Yes!"

legrap AY 6



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www.k9ya.org telegraph@k9ya.org "Can you hear everything that is sent from every other office?"

"Yes," was the weary reply, as Nattie rubbed her dress.

"What!" exclaimed the owner of the nose, in accents of incredulous wonder. "All over the world?"

"Certainly not! only the offices on this wire; there are about twenty," was the impatient reply.

"Ah!" evidently relieved. "But," considering, "supposing you do not catch all the sounds, what do you do then?"

"Break."

"Break! Break what? the instruments?" queried the owner of the nose, perplexedly, and looking as if that must be a very expensive habit.

"Break the circuit—the connection,—open the key and ask the sending office to repeat from the last word I have been able to catch!"

Then seeing unmistakable evidence of more questions in the nose, Nattie threw the ink-soaked blottingpaper and her last remnant of patience into the waste basket, and added,

"But you must excuse me, I am too busy to be annoy—interrupted longer, and there are books that will give you all the information that you require!"

So saying, Nattie turned her back, and the owner of the nose withdrew it, its tip glistening with indignation as she walked away. As it vanished, Nattie gave a sigh of relief, and sat down to mourn her ruined dress. Whatever may have been her previous opinion, she was positive now that this was the prettiest, the most becoming dress she had ever possessed, or might ever possess! Only the

old, old story! We prize most what is gone forever!

"And all that dreadful man's—or woman's—fault at X n!" cried Nattie, savagely. Unjustly too, for if any one was responsible for the accident, it was the owner of the nose.

But not long did Nattie dare give way to her misery. That fatal message was not yet received. Glancing over the few words she had of it, she read; "Send the hearse —," and then she began anxiously "calling" "X n."

"Hearse," looked too serious for trifling. But either "X n's" attention was now occupied in some other direction, or else he—or she—was too much out of humor to reply, for it was full twenty minutes before came the answering,

"X n."

At which Nattie said as fiercely as fingers could,

"I have been after you nearly half an hour!"

"Have you?" came coolly back from "X n."

"Well, you are not alone, many are after me-my landlord among others-not to mention a washerwoman or two!"

Then followed the figure "4," which means,

"When shall I go ahead?"

"Waxing jocose, are you?" Nattie murmured to herself, as she replied:

"G. A,—hearse—"

"G. A.-what?"

"Hearse," repeated Nattie, in firm, clear characters.

To her surprise and displeasure "X n" laughed—the circumstance being conveyed to her understanding in the usual way, by the two letters "Ha!"

"What are you laughing at?" she asked.

"At your grave mistake!" was "X n's" answer, accompanied by another "Ha! To convert a horse into a hearse is really an idea that merits a smile!"

As the consciousness of her blunder dawned upon her, Nattie would gladly have sank into oblivion. But as that was impossible, she took a fresh blank, and

very meekly said,

"G. A.-horse-!"

With another laugh, "X n" complied, and Nattie now succeeded in receiving the message without further mishap.

"What did you sign?" she asked, as she thankfully wrote the last word.

Every operator is obliged to sign his own private "call," as well as the office

"call," and "O. K." at the close of each message.

"C." was replied to Nattie's question.

"O. K. N. B m," she then said, and added, perhaps trying to drown the memory of her ludicrous error in politeness, "I hope another time I shall not cause you so much trouble."

"C" at "X n" was evidently not to be exceeded in little speeches of this kind, for he—or she—responded immediately,

"On the contrary, it was I who gave you trouble. I know I must certainly have done so, or you never could have effected such a transformation as you did. Imagine the feelings of the sender of that message, had he found a hearse awaiting his arrival instead of a horse!"



Biting her lip with secret mortification, but determined to make the best of the matter outwardly, Nattie replied,

"I suppose I never shall hear the last of that hearse! But at all events it took the surliness out of you."

"Yes, when people come to a hearse they are not apt to have any more kinks in their disposition! I confess, though," "C" went on frankly, "I was unpardonably cross; not surly, that is out of my line, but cross. In truth, I was all out of sorts. Will you forgive me if I will never do so again?"

"Certainly," Nattie replied readily. "I am sure we are far enough apart to get on without quarreling, if, as they say, distance lends enchantment!" "Particularly when I pride myself upon my sweet disposition!" said "C."

At which Nattie smiled to herself, to the surprise of a passing gentleman, on whom her unconscious gaze rested, and who thought, of course; that she was smiling at him.

Appearances are deceitful!

"I fear you will have to prove your sweetness before I shall believe in it," Nattie responded to "C," all unaware of what she had done, or that the strange young gentleman went on his way with the firm resolve to pass by that office again and obtain another smile!

"It shall be my sole aim hereafter," "C" replied; and then asked, "Have you a pleasant office there?"

"I regret to say no." Then looking around, and describing what she saw— "a long, dark little room, into which the sun never shines, a crazy and a wooden chair, a high stool, desk, instruments that is all—Oh! and me!"

"Last but not least," said "C;" "but what a contrast to my office! Mine is all windows, and in cold days like this the wind whistles in until my very bones rattle! The outward view is fine. As I sit I see a stable, a carpenter's shop, the roof of the new Town Hall that has ruined the town, and —"

"Excuse me,"—some one at another office on the line here broke in—and with more politeness than is sometimes shown in interrupting conversations on the wire— "I have a message to send," and forthwith began calling.

At this Nattie resumed her interrupted occupation of bewailing her spoiled dress, but at the same time she had a feeling of pleased surprise at the affability of "C" at "X n."

"I wonder," she thought, as she took up her book again, and tried to bury the remembrance of her accident therein, "I do wonder if this 'C' is he or she!"

Soon, however, she heard "X n" "call" once more, and this time she laid her book aside very readily.

"You did not describe the principal part of your office—yourself?" "C" said, when she answered the "call."

"How can I describe myself?" replied Nattie. "How can any one—properly? One sees that same old face in the glass day after day, and becomes so used to it that it is almost impossible to notice even the changes in it; so I am sure I do not see how one can tell how it really does look—unless one's nose is broken—or one's eyes crossed—and mine are not—or one should not see a looking glass for a year! I can only say I am very inky just now!"

"Oh! that is too bad!" "C" said; then, with a laugh, "It has always been a source of great wonder to me how certain very plain people of my acquaintance could possibly think themselves handsome. But I see it all now! Can you not, however, leave the beauty out, and give me some sort of an idea about yourself for my imagination to work upon?"

> "Certainly!" replied Nattie, with a mischievous twinkle in her eye that "C" knew not of. "Imagine, if you please, a tall young man, with—"

"C" "broke "quickly, saying,

"Oh, no! You cannot deceive me in that way! Under protest I accept the height, but spurn the sex!"

"Why, you do not suppose I am a lady, do you?" queried Nattie.

"I am quite positive you are. There is a certain difference in the "sending," of a lady and gentleman, that I have learned to distinguish. Can you truly say I am wrong?"

Nattie evaded a direct reply, by saying,

"People who think they know so much are often deceived; now I make no surmises about you, but ask, fairly and squarely, shall I call you Mr., Miss, or Mrs. 'C?"

"Call me neither. Call me plain 'C'! Or picture, if you like, in place of your sounder, a blonde, fairy-like girl talking to you, with pensive cheeks and sunny—"

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"I will agree never

to say 'cross!""

Electromagnetic Pulses

Paul W. Ross, W3FIS



Every now and then, the issue of electromagnetic pulses gets dragged up. In our increasingly electronic and automated society, we have become critically dependent on a whole raft of devices, many of whose components can only be seen with a microscope.

Unfortunately, these devices are especially susceptible to utter and complete destruction by a variety of electrical phenomena. Those of you who have recently built ama-

teur equipment know that many parts are shipped stuck into electrically conductive foam and then placed in a metallized static-proof bag, for good reason, as they can be rendered useless by simple static discharges.

A very interesting problem in our lessthan-perfect world is that of electromagnetic pulses generated by the explosion of atomic bombs. Years ago, in another life, I worked summers for Edgerton, Germeshausen, and Grier in Boston, Massachusetts. Harold Edgerton, a professor at MIT, along with Ken

Germeshausen and Herb Grier, two of his students, were the fellows who developed the electronic flash in the 1930.

They were, among other things, the firm that did the timing and firing of atomic bombs for the old Atomic Energy Commission. One of the tales I heard while there was how the British, when they lit off their first device, summarily "fried" the electronics. They did not understand the immense pulse, comparable to a super strong lightning strike, would get into some sensitive amplifiers. Poof!

So, why should we, as radio amateurs be concerned with this? We aren't likely to be popping off atomic bombs in our backyards, I would hope! Other people might, and there are other sources of strong electromagnetic pulses we should be aware of. With the prevalence of FET front-ends, our receivers are much more prone to damage than our old vacuum tube systems. In point of fact, it appears the old Soviet Union continued to use vacuum tube equipment much longer than we did in military applications, due to concern for just this issue, as well as not being so highly developed in semi-conductor technology.

Well, what is the deal here? Where or how does an EMP get created? Basically, we go back to our study of physics. A changing magnetic field can produce an induced voltage in a nearby circuit. A current-carrying conductor produces a changing magnetic field with either a change in current, or a change in position. It is that simple...

The "current carrying conductors" we need to be concerned with arise from two sources:

- Nuclear explosions in the upper atmosphere.
- Lightning strikes.

• Electric arcs and surges from electrical equipment starting, such as motors.

• Various electronic devices, e.g., the notorious "wall warts" that use switching power supplies.

The first three these produce a plasma (gas–stripped of electrons), which nicely conducts electricity. All of these current surges result in steep wave fronts. A mathematical technique known as

Fourier analysis says we can represent a steep- fronted electrical waveform as an infinite series of single frequencies. This is why you will hear a lightning flash, or rather its electrical effects, up and down the bands, especially on the broadcast band, or 160- and 80-meter amateur bands.

If these strikes or events are close enough, the signals cause no end of mischief in your sensitive FET frontend receivers! In many cases, the induced current is enough to cause significant direct damage to conductors, literally melting them where they are.

A series of interesting nuclear explosion tests were run back in the early days of atomic testing. The Soviets managed to take out parts of their power grid, and

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Memorial Radio Club

That Defining Moment

Charlie Cotterman, KA8OQF

I'd been an SWL of one intensity or another for years—cheapo SW portables from the pawn shop window in high school, to SW boom boxes in the military, to real (albeit grapefruit league) SW receivers like the Radio Shack DX-302. With a small antenna mounted outside on the awning and a copy of the WRTH and some late nights listening to far-off broadcasts of "their" news and, of course, there were the ham bands scattered here and there.

One night, tuning around on 20-meters, if I recall, I heard a South American station working a JA, and someone commented on power levels. Having taken a couple of high school electronics courses, it clicked that these two people were talking halfway around the world to each other using less electricity than it took to light the bulbs in the room I was sitting in. That was the moment I remember thinking I had to learn more about this.

I signed up for classes given by the Dayton Amateur Radio Association in September of 1981. The theory wasn't terribly tough (remember those high school electronics classes?). I remember concentrating fiercely on the code, back then in the days of 5-wpm. For some reason, the code appealed to me (still does, it's my favorite mode). My two instructors were Ross, WA8DQH, and Tim, KA8CPO.

By the time it was over, I had my ticket the first week of January 1982. That first contact was made under the supervision of Tim, we sortakinda made it legal by him "selling" me his station for a dollar. I was sweating bullets, but I'll never forget that first time, W4WYH, Tom, in East Port, Ga. That was the start of a long and wonderful relationship with CW that continues to this day. Eventually, I wound up teaching classes myself with Tim and it was a real big day when I got my Extra and told Tim about it (he was an Advanced... hee, hee, hee, I beatcha...).

First rig was a Heathkit HW-101 that I really didn't know how to tune properly. That one didn't last long. A Yaesu FT-757GX was the one that took me all over the world, from home and in the car.

I've moved a couple of times, so my HF from home is quite limited due to space restrictions etc. My HF operations are still non-phone (CW, and the newer digital modes), but I do them from the DARA club station, W8BI, and I'm working with several club education groups in different areas for getting newcomers on the air, training on proper transmitter adjustments, use of digital modes, and minor league contesting.

I could tell stories from now until the Mayan calendar expires, but there are others with their stories out there. Suffice it to say I've gotten to go lots of places and do lots

of things (including getting at least one job) because of ham radio.

What Was Your Defining Moment?

That split second when you knew you had to be a ham. We've all had that moment—so, put it down on paper and share it with your fellow hams via the *K9YA Telegraph*.



TYPES OF KEYS





Robert F. Heytow Memorial Radio Club

www.k9ya.org telegraph@k9ya.org we did some damage to electrical systems in Hawaii, some 900 miles away from the atmospheric test site in the Pacific Ocean.

Ignoring what might be termed "Hollywood" scenarios, what can we do? In the nuclear blast case, not much, other than to have "hardened" facilities for our electrical systems. This is well beyond the capabilities of most amateurs. Simply disconnecting antennas, and grounding them well is the best bet. When I leave home for any substantial period of time, I disconnect my equipment from the "bulkhead" connectors leading into the shack. However, a direct lightning strike is still going to be a problem. Over the years, I've lost a few modems, telephones, and one TV set to lightning strikes. Be warned...

Use of good grounds, ferrite chokes, surge/lightning suppressors, and a good dose of common sense can go a long way toward mitigating potential problems. If all the cool electronics in your house are giving you fits, look at your grounding, and try running equipment off of batteries. All that nice portable stuff you use for Field Day can be your friend! Try disconnecting your home electronics, reconnect them one at a time, and see where the offenders are. A small portable all-band receiver, such as the Yaesu VR-500 is especially handy as a "probe" for finding sources of electromagnetic interference.

Oh yes, if you want a good book to read, get a copy of *One Second After*, by William R. Forstchen, which is a work of fiction (thank goodness!) about the results of an atmospheric nuclear blast on a small town. I bet you won't sleep nights if you read it... Where is my Faraday cage bomb shelter when I need it?



AYG

Robert F. Heytow Memorial Radio Club

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 K9YA Telegraph Contributing Editor, Rod Newkirk, VA3ZBB/

 W9BRD, and XYL Betty Broome-Newkirk, VE3ZBB. Rod is

 recovering from a stroke and hopes to be writing again soon.

"Don't you believe a word of it!"—some one on the wire here broke in, wishing, probably, to have a finger in the pie; "picture a hippopotamus, an elephant, but picture no fairy!"

"Judge not others by yourself, and learn to speak when spoken to!" "C" replied to the unknown; then "To N.—You know the more mystery there is about anything, the more interesting it becomes. Therefore, if I envelop myself in all the mystery possible, I will cherish hopes that you may dream of me!"

"But I am quite sure you can, with propriety be called Mr. 'C'—plain, as you say, I doubt not," replied Nattie. "Now, as it is time for me to go home, I shall have to say good-night."

"To be continued in our next?" queried "C."

"If you are not in a cross mood," replied Nattie.

"Now that is a very unkind suggestion, after my abject apology. But, although our acquaintance had grave re-hearse-al, I trust it will have a happy ending!"

Nattie frowned. "If you will promise never to say 'grave,' 'hearse,' or anything in the undertaking line, I will agree never to say 'cross!'" she said.

"The undertaking will not be difficult; with all my heart!" "C" answered, and with this mutual understanding they bade each other "good-night."

"There certainly is something romantic in talking to a mysterious person, unseen, and miles away!" thought Nattie, as she put on her hat, "But I would really like to know whether my new friend employs a tailor or a dressmaker!"

Was Nattie conscious of a feeling that it would add to the zest of the romantic acquaintance should the distant "C" be entitled to the use of the masculine pronoun?

Perhaps so! For Nattie was human, and she was only nineteen!

WIRED LOVE—the Book

K9YA Telegraph is pleased to offer, Wired Love: A Romance of Dots and Dashes, the book, to our readers. This 19th century telegraphic romance demonstrates Internet dating is not so new after all.

The book was painstakingly recreated by *K9YA Telegraph* volunteers and offered to our readers through Lulu at our cost.

http://www.lulu.com/product/paperback/wiredlove-a-romance-of-dots-and-dashes/14252429



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Website, manufactured a variety of hardware storetype metal products and the metal numerals, letters and tags used in "property marking" applications. Today, the hardware store line has been dropped in favor of the property marking items.

The "Premax" appellation refers to "the premium quality of its products." Nowhere on the Website is noted the firm's entries in the, specifically, amateur radio marketplace aside from: *Premax also branched out into the antenna business, manufacturing a wide range of antennas for marine, police, and civilian use. During World War II Premax was a certified supplier of PT boat whip antennas.*



Premax Vertical Antenna Base Insulator

Were the antenna and mount used aboard PT boats the same as those previously available to hams and for commercial use? Some clues can be found in two wartime U.S. Navy publications and in the *Popular Mechanics* article.

Detail and Special Specifications for Building Motor Torpedo Boats, published 1944, states, Section S67: Radio communication equipment will be furnished by the government and shall be installed and connected for operation by the shipbuilder in accordance with plans approved by the Bureau. The equipment will consist of radio transmitters, receivers, whip antennas and antenna insulators.

The 1945 U.S. Navy publication, *Know Your PT Boat*, cautioned radio operators the antenna "Will freeze into one solid rod if you do not lubricate it and exercise its sections" adding, "On patrol, it is ordinarily best to use maximum height." This citation cinches it was a telescoping mast.

From the *Popular Mechanics* article, "The Monel-metal variety shown in the photo [photo of a small yacht bearing a vertical antenna] is specially designed for

marine installations where high strength and unusual resistance to corrosion are prime considerations."

The availability of corrosion-resistant Monel masts, an alloy composed primarily of nickel and copper, made that version a shoo-in for marine applications. Energizing the Premax antenna was the Collins TCS radio set (1,500 kc to 12,000 kc). Mounted near the helm, the 20-foot "telescoping tubular antennas, [were] made of sections of seamless tubing furnished by the Superior Tube Co." of Collegeville, Pa.

At the Premax site is a copy of a January 4, 1944 telegram from the Chief of the Bureau of Ships, Rear Admiral E.L. Cochrane, lauding the "men and women of Premax Products Division" for making the antennas used aboard the "mosquito boats."

Postwar, Premax antennas in various guises, including mobile versions, were available to amateurs through at least the early 1960s.

References

Chicago Daily Tribune, January 25, 1947

The A.R.R.L. Antenna Book, George Grammer and Byron Goodman, The American Radio Relay League, Inc., West Hartford, Ct., 1939

Catalogue of Electronic Equipment, Bureau of Ships, Navy Department, NavShips 900.116, Supplement No. 5, 1 October 1952

Detail and Special Specifications for Building Motor Torpedo Boats: PT 565-624 (80-foot): For the United States Navy, Bureau of Ships, Navy Department, 31 March 1944

Know Your PT Boat, The Bureau of Ships, Technical Publication No. 9, NAVSHIPS 250-222-1, 15 July 1945

Popular Mechanics, December 1938, November 1940

Mobile Radio Handbook, FM-TV-Radio Communications, 1950

US Patrol Torpedo Boats: World War II, Gordon L. Rottman, Osprey Publishing Ltd., N.Y., 2008, ISBN: 978 1 84603 227 1



In the November 2010 *K9YA Telegraph* article, "Two Iambic to Single Lever Mods," by Paul Signorelli, WØRW, the "piece of hard sleeving/ tubing" referenced in paragraph two should be "0.3 inches long" not "0.02 inches long."



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