



The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

October 2010

Volume 16 Issue 10



Reported by
Marv Beeferman

The ON-LINE Broadcaster

The New Jersey Broadcaster is now online. To date, close to 100 of your fellow NJARC members have subscribed, saving the club nearly \$2000 a year and a significant amount of work. Interested? To subscribe, send your e-mail address to mbeeferman@verizon.net. Be sure to include your full name.

The September meeting was opened with a demonstration by Matt Reynolds of proposed enhancements to our NJARC website. Matt's significant experience in this area was embraced by webmaster Dave Sica as the next stage of elevating the high standards of our present site to the next level. After talking with Matt, one of the improvements will allow me, or anyone else, to easily post the multitude of photos (with a search capability) that trace club history for all to share. We all wish the Sica/Reynolds team future success in this endeavor.

Auctioneers Sal Brisindi and Richard Lee did a great job in conducting another club auction. Special thanks go out to John Dilks who donated half his auction proceeds to the club. You'll find some photos and typical prices in this month's *Broadcaster*. Thanks to reporters John Tyminski and Matt Reynolds, I've also included a review of the September 25th Repair Clinic.

InfoAge's "Haunted Hotel" is now in its fifth year but this year it's a "Haunted Hike." Tour guides will bring you on a half-mile outdoor tour around the site's haunted grounds..."Witness the horror, encounter the wraith, and follow your



MEETING NOTICE

*****NOTE: MEETING AT PRINCETON*****

This month's meeting will take place at Princeton, NJ on Friday, October 8th, at 7:30 PM. Directions are posted on the club's website (<http://www.njarc.org>). Airships and wireless? Join us for a unique presentation by NJARC member (and recent AWA Houck Award winner) John Dilks who will link these two subjects via the adventures of "Jack Irwin - Marconi Wireless Man."

guide into the depths of Camp Evans." Casper's House is designed for those too scared to go on the Haunted Tour and is recommended for children six and under. Included are arts and crafts, some less scary entertainment and a train ride.

The tour runs from 7-11 PM on October 9, 15, 16, 22, 23, 29 and 30th. General admission is \$12, with \$5 for children six and under. Additional information may be found at www.campevanhaunt.com.

Of course, the club could always use help in setting up and manning the "Mad Scientist" display which is always a big hit. Volunteers are also welcome to lend a hand for any aspect of one of InfoAge's biggest fund raising events of the year. If you care to participate, contact Ray Chase, Harry Klancer or Dave Snellman.

In the Fall 2010 edition of *The Michigan Antique Radio Chronicle*, I came across an article ("Endangered Species?") by John Reinicke which may be of interest:

"This is a bit of observation and it may be an indication of a trend we collectors should keep in mind. The endangered species I am referring to is "leaded" components - electronic components with wire leads. In the past few months, I have noticed that at several suppliers, when I have placed an order, many items are not in stock and some have quite long backorder lead times or are no longer available. This, of course, could be a reflection of the state of the economy and the movement of the electronics industry overseas. But, I fear, it may also be an indication of the end of components with wire leads. The electronics industry went to surface

mount components over a decade ago for new designs. It is logical to conclude that the older designs are now being retired and the demand for leaded components is dwindling."



"As old radio collectors, we have been able to repair our sets taking advantage of really quite high quality and readily available modern components. However, for our repairs, it is highly desirable for these components to have wire leads. Of course, one can solder wire leads onto a surface mount component (if your eyes are still good enough to see it) and then cover it with shrink tubing. This would be a bit of a hassle."

"I am suggesting we would do well to keep an eye on this and perhaps now would be the time to lay in a supply of capacitors, resistors, and old style terminal blocks."

John may have a good point, or there may be enough old stock around to suit our needs for years to come. What do you think?

Finally, it's time to reserve your tables for the club's Fall swapmeet in Parsippany on Saturday, November 6th. Full details are presented in this month's *Broadcaster*.

THE JERSEY BROADCASTER is the newsletter of the New Jersey Antique Radio Club (NJARC) which is dedicated to preserving the history and enhancing the knowledge of radio and related disciplines. Dues are \$20 per year and meetings are held the second Friday of each month.

The Editor or NJARC is not liable for any other use of the contents of this publication.

PRESIDENT:

Richard Lee
(914)-589-3751

VICE PRESIDENT:

Harry Klancer
(732)-238-1083

SECRETARY/EDITOR:

Marv Beeferman
(609)-693-9430

TREASURER:

Sal Brisindi
(732)-308-1748

SERGEANT-AT-ARMS (WEST):

Darren Hoffman

SERGEANT-AT-ARMS (EAST):

Rick Weingarten
(732)-370-8206

TRUSTEES:

Ray Chase (908)-757-9741
Phil Vourtsis (732)-446-2427
Walt Heskes (732)-205-9143

TECHNICAL COORDINATOR:

Al Klase
(908)-782-4829

TUBE PROGRAM:

Gary D'Amico
(732)-271-0421

SCHEMATIC PROGRAM:

Aaron Hunter
(609)-267-3065

CAPACITOR PROGRAM:

John Rucolo
(609)-426-4568

RESISTOR PROGRAM:

Walt Heskes
(732)-205-9143

WEB COORDINATOR:

Dave Sica
(732)-382-0618
<http://www.njarc.org>

MEMBERSHIP SECRETARY:

Marsha Simkin
33 Lakeland Drive
Barnegat, N.J. 08005
(609)-660-8160

JACK IRWIN: MARCONI WIRELESS MAN

By
John Dilks K2TQN

At the October NJARC meeting, member John Dilks will present another gripping presentation into the history of early wireless. The following wets our whiskies regarding what we can expect...Ed

In August 1901, the Marconi Company built a station at Siasconset, on the island of Nantucket. Another station was installed forty-two miles away aboard Nantucket Lightship No. 66 which would become the first point of contact for ocean liners bound for New York. Sometime around 1906, a young wireless operator named Jack Irwin was assigned as one of four operators.

Just before 4 AM on January 23, 1909, while on the graveyard shift, Irwin heard a weak call for help:

"C.Q.D. C.Q.D. Attention all stations. Distress. The Republic rammed by unknown steamer 175 east of Ambrose Light. Lat. 40.7, Lon. 70."

It was from the White Star liner the RMS Republic, 60-miles away, which had just been rammed by the Italian liner Florida and was sinking.

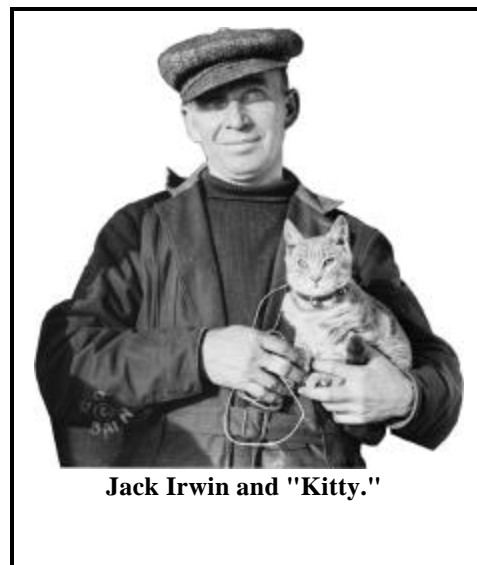
Irwin quickly took charge and contacted the Baltic and several other nearby ships which all headed towards the Republic in thick fog. Six people were killed in the crash, three from each ship, but because of wireless 1,500 people were successfully rescued. The wireless operator aboard the Republic was Jack Binns who was also quite a hero.

Jack Irwin returned to sea duty after that. But it was his next assignment that would make history. One hundred years ago this October, he used wireless to call CQD himself from an airship to a ship at sea. Again, the rescue was successful but I'm ahead of myself. The story about how he got to the point where he needed to be rescued is really interesting.

His airship adventure would begin in

Atlantic City. On the morning of October 15, 1910, Jack Irwin was awakened about 4 o'clock and told to go aboard. There was not a breath of wind. A dense fog dripped down over everything. The crew of the airship consisted of Messrs. Walter Wellman, commanding; Melvin Vaniman, chief engineer; Louis Loud and Fred Aubert, assistant engineers; Murray Simon, navigator; and Marconi Wireless man Jack Irwin. With the help of a few hundred police and firemen, they proceeded to launch the largest non-rigid airship ever constructed.

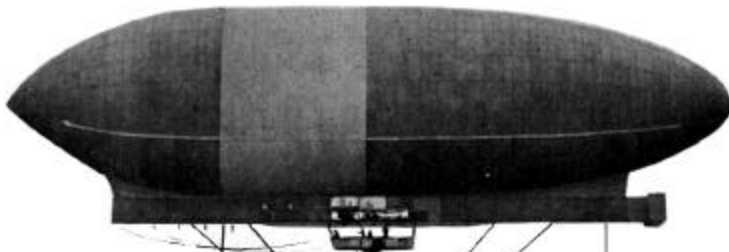
At 8 AM, all was in readiness and the crew climbed aboard the airship. The last to embark was the mascot, a pretty foundling kitten that had been a stray pet around the hangar. The crew had jokingly told visitors that the kitten was going along with them and just as the word to "let go" was passed, somebody in the crowd threw the kitten into the lifeboat where Irwin had taken his station. Up they went and the cat was one of the crew! Kitty, at first, appeared scared and raised an awful "holler," but he (yes, it was a Tom!) soon settled down. In the long days and longer nights that followed, Irwin admitted that he was grateful for that kitten's affectionate company. It was always to be found cuddled up to next to Irwin in the wireless corner of the airship's lifeboat.



Jack Irwin and "Kitty."

And so the adventure begins. Be sure to attend the October meeting to see how it ends.

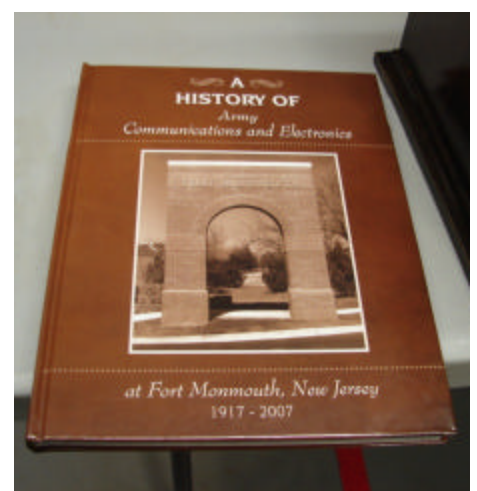
~When the 'America' Put Out to Sea~
Fog~Wind~Disaster~and~Rescue.



Told by ~ Jack Irwin ~
~ The First Airgoing Wireless Man



SEPTEMBER'S AUCTION AT INFOAGE



This Panasonic RF-2200 multi-band radio sold for \$59.



A Signal Corps BC-348-Q receiver received a \$15 winning bid.

This Fort Monmouth history was presented as a gift to retiring employees and visiting dignitaries. Commercially unavailable, it sold for \$28.



This General Radio Megohm bridge sold for only \$6.



The winning bid for an Atwater Kent in a Kiel cabinet was \$65.



A Hallicrafters SX-62 needing a little work was proudly held high by Darren Hoffman and Sal Brisindi and was hammered down at \$35.



A Crosley 52 Special DeLuxe 3-tube regenerative receiver sold for \$45.



A nice 1925 Stewart Warner 325 received a \$60 winning bid.



This Knight (Allied Electronics) phono transmitter sold for \$26.

REPAIR CLINIC AT INFOAGE

I couldn't make September's repair clinic but thanks to the input from reporters John Tyminski and Matt Reynolds, we're able to provide a brief report and some pictures of the day's activities...Ed

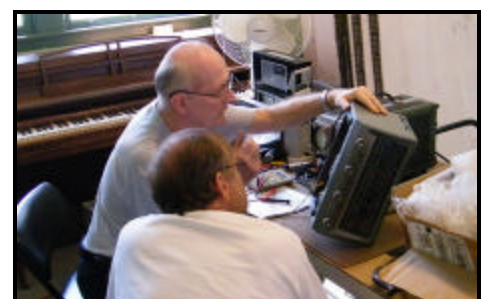
- Dan Saporito and John Tyminski worked on a Philco 37-11 and Philco 47-250 with audio problems.
- Marty Friedman diagnosed a 1948 Silvertone with a bad oscillator tube.
- Harry Klancer and John Tyminski worked on a Philco 49-909 AM-FM radio

with a missing tube, one bad tube, bad capacitors and dead FM circuitry.

- Aaron Hunter and Walt Heskies worked on a Grundig 870 AM-FM radio. Following recapping, it was left with the AM working but with FM problems.
- Aaron Hunter worked on a Hallicrafter with bad capacitors and a bad 50C5 output tube.
- John Tyminski worked on a Philco 80. A Control shaft was replaced and cut to size, the power transformer was checked and the radio was given a good cleaning.
- Richard Lee and John Tyminski worked on a Patterson PR-10 1934 communications receiver.
- Phil Vourtsis worked on a 45-player, replacing the motor bushings, cleaning the drive wheel and cam wheel, replacing the cartridge and performing a full adjustment.

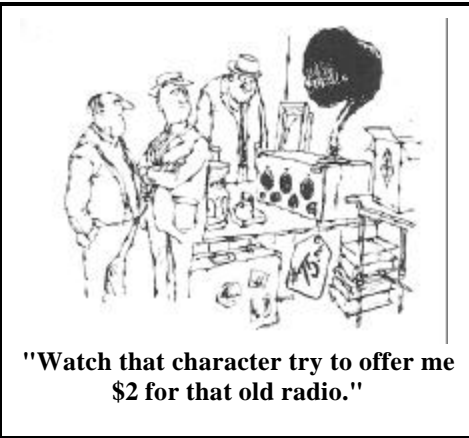
•Al Klase "ran around all day, getting parts and other things." (Sorry Al, but I just had to repeat this exactly the way it was sent to me.)

•John Tyminski worked on a 1949 RCA radio, replacing capacitors and a bad tube. The radio was left working. John also worked on his Atwater Kent 145 tombstone, finding it working after a single tube replacement. However, it will still need recapping and replacement of wire with deteriorated rubber insulation.

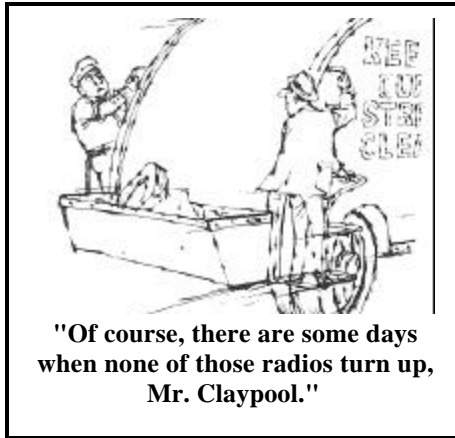




RADIO COLLECTOR HUMOR*



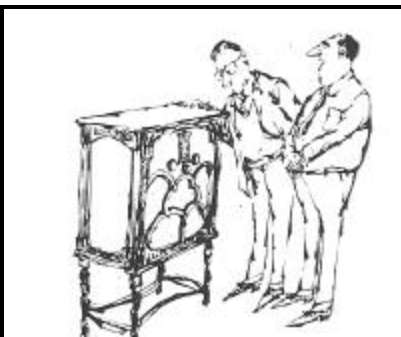
"Watch that character try to offer me \$2 for that old radio."



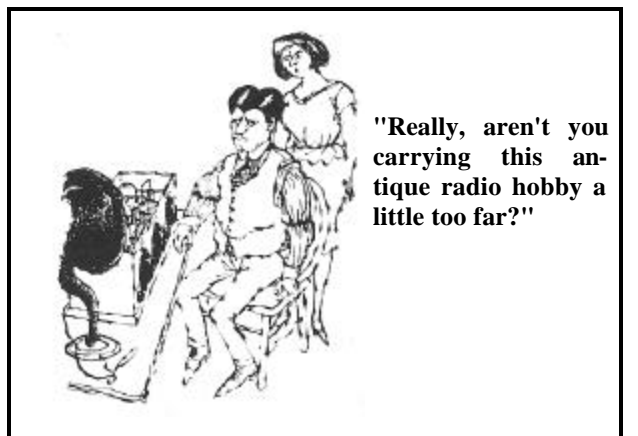
"Of course, there are some days when none of those radios turn up, Mr. Claypool."



"...Oh, stop it Joe - you'll never be able to make a 201-A"



"Outside of a nuvistor r.f. stage, a transistorized audio section, a silicon rectifier, a ferrite antenna and a diode detector, it's a real classic."



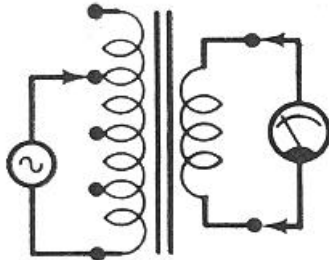
"Really, aren't you carrying this antique radio hobby a little too far?"

*By Rodrigues (Popular Electronics, October 1964)

Transformer Quiz

(By Robert Balin, *Popular Electronics*, April 1962)

Basically, a transformer is an electrical device in which a magnetic field produced by a primary winding is used to induce a voltage in a secondary winding. But there are as many fine points to transformer theory as there are transformer types. Here's a chance to review and test your transformer theory by answering the questions below. Answers can be found on page 8 of the *Broadcaster*.



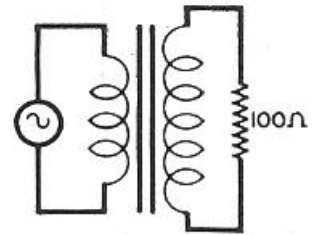
1 "Tapping down" the primary winding of any transformer increases the output voltage of the secondary winding of the transformer.

TRUE FALSE



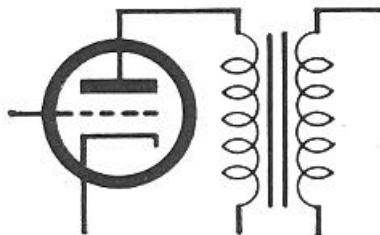
2 If a 50-cps transformer is operated at 60 cps, the transformer will overheat.

TRUE FALSE



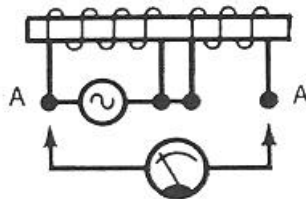
3 A 1:2 primary-to-secondary turns ratio will make 100 ohms across the secondary look like 25 ohms to the primary winding.

TRUE FALSE



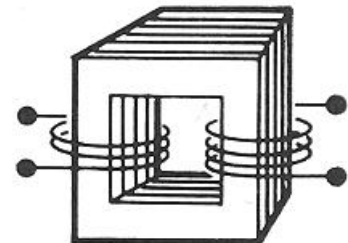
4 The gain of a transformer-coupled audio amplifier stage tends to increase at the low frequencies.

TRUE FALSE



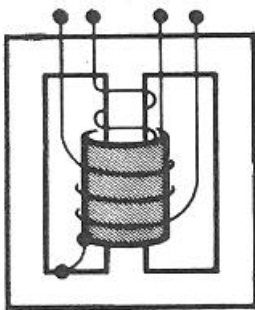
5 With two coils wound in the same direction on a core, as shown above, the voltage across A—A will be the sum of the voltages across each coil.

TRUE FALSE



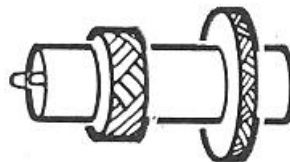
6 Transformer iron cores are laminated in order to reduce the heat generated by induced "eddy currents."

TRUE FALSE



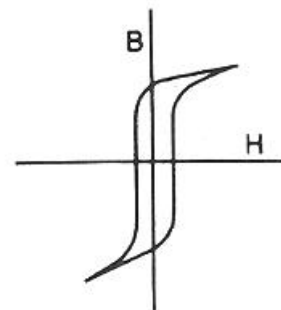
7 A "Faraday screen" is a copper sheet used to reduce inductive coupling between windings.

TRUE FALSE



8 The windings of r.f. transformer coils are spiraled back and forth to reduce their distributed capacitance.

TRUE FALSE



9 Power transformers are made with a laminated iron core material having a narrow hysteresis loop characteristic.

TRUE FALSE



New Jersey Antique Radio Club's FALL SWAP MEET



Parsippany PAL Building
Smith Field
Route 46 & 33 Baldwin Road
Parsippany, New Jersey 07054



Saturday, November 6, 2010

**Walk around auction
starts at 11:30 am.
Bring in your attic
treasures for free
appraisal!**



**Expert Antique Radio
Repair Available.
Refreshments Available.
Easy ground level access.**

Open to the Public

8 AM to 12 noon

Vendor setup at 7:15 AM

\$5.00 ENTRANCE FEE

CLUB DONATION

(70) 8 ft. Tables

\$20.00 for members

\$25.00 for non-members

Reserved Additional Tables \$15.00

At the Door \$20.00

FOR DIRECTIONS

VISIT OUR WEBSITE: WWW.NJARC.ORG

OR MAPQUEST.

(33 Baldwin Rd., Parsippany, NJ 07054)

Vendors Make Your Reservations Now!

Contacts:

President

**Richard Lee
(914) 589-3751**

radorich@prodigy.net

Vice President

**Harry Klancer
(732) 238-1083**

klancer2@comcast.net

Secretary

**Marv Beeferman
(609) 693-9430**

mbeeferman@cs.com

CONNECTIONS

Free exposure for buyers and sellers! Unless requested otherwise, each ad will run for two months in both the *Jersey Broadcaster* and the *Delaware Valley Oscillator*. All buying and selling transactions are the responsibility of the parties involved. **Send your ad to mbeeferman@cs.com**

Are you aware that NJARC now has a resistor program which includes many commonly needed replacements? Contact Walt Heskes at any club meeting for details.

TIPS & KINKS

Radio Alignment Aid

A radio with a slide-rule dial can be difficult to align when out of its cabinet because the frequency markings are on the set's dial window and not on the chassis dial plate. To remedy this shortcoming, cut out a narrow strip of paper and duplicate the calibration markings on the radio's dial window. Then glue the paper to the set's dial plate; orientate it so that it aligns exactly with the scale on the dial window and where it won't be visible when the chassis is in the cabinet.

Emergency Screw Starter

To start a bolt or screw in a tight corner when a screw-starting screwdriver is not available, try the following. Poke a hole the size of the threaded part of the bolt or screw in a strip of cellophane or masking tape. Then pass its threads through the



hole with the sticky side of the tape facing the head. Finally, draw the ends of the tape up and stick them tightly to the screwdriver's blade. A twist and pull of the screwdriver will pull the tape away after the threads have been started.

You can use a similar technique for a

nut, positioning it over the hole in the tape so that its threads are accessible.

Let's see some tips and kinks from the membership...I know they're out there. A photo is a nice addition...Ed

FOR SALE

Check out NJARC's capacitor program for those most commonly needed replacements. Contact John Ruccolo at any club meeting or call him at home (609)-426-4568 to find out what's available. All proceeds go to the club.

Car stereo system by Kenwood consisting of KRC-777 in-dash AM/FM/cassette stereo, KGC-9400 under-dash graphics equalizer and KAC-7020 70 watt stereo power amp. Upgrade your 1970-80s vehicle with great sound. All items new in original packaging. Being sold for a club supporter; can bring to next meeting. \$100 Ray Chase, raydio862@verizon.net, (908)-757-9741

WANTED

Someone to repair a Philco model 41-221. Paul Brown (non-member), Tuckerton, NJ, (609)-294-1148. excellentpainter@yahoo.com.

Now that you've disposed of some of that old stuff by using our FOR SALE section and have plenty of empty space, or just need a few parts to complete that restoration...

YOUR "WANT" AD HERE!

ANSWERS TO TRANSFORMER QUIZ

1. **TRUE** Decreasing the number of turns used in the primary winding will increase the turns ratio of the windings. Hence, the voltage ratio will be increased.
2. **FALSE** As the frequency of the supply voltage is increased, the inductive reactance of the transformer windings increases and less heat due to loss currents is produced by the same amount of input voltage.
3. **TRUE** The impedance ratio of a transformer varies directly as the square of the turns ratio and is therefore 1:4 or 25 ohms in this instance.
4. **FALSE** The transformer primary winding impedance decreases as the signal frequency is reduced. Since the primary winding is the plate load for the vacuum tube stage, the resulting lowered plate load impedance causes a reduced output.
5. **TRUE** Both coils will act as the secondary winding and develop an output voltage will be the sum of the voltages across each coil. However, the output voltage will be 180 degrees out of phase with the input voltage.
6. **TRUE** Eddy currents exist in the iron core due to the alternating magnetic field. Assembling a core made of thin sheets insulated from each other tends to keep these loss currents and the resulting heat to a minimum.
7. **FALSE** The Faraday screen is used to prevent the transfer of electrical energy between the windings by capacitive coupling.
8. **TRUE** A "universal" winding prevents the adjacent turns in a coil from running parallel to one another. The capacitance between turns is thereby kept to a minimum and a more uniform coil Q for a wide band of frequencies is obtained.
9. **TRUE** The area enclosed by the hysteresis loop is a measure of the electrical energy lost as heat when the atoms of the core material are rearranged because of the cyclical magnetization of the core. Hence, the narrower the sides or the smaller the area within the loop, the less the losses in a core material. (Remember, losses can never be completely eliminated.)