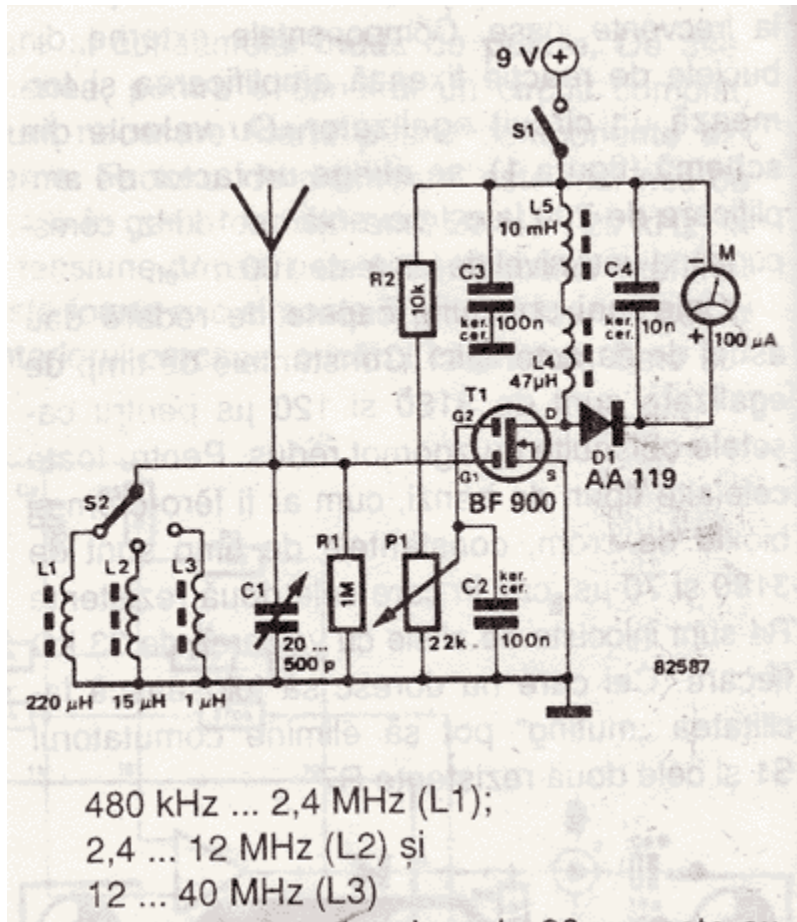


K9TRC is pleased to be affiliated with the American Radio Relay League (ARRL)

K9TRC –News:



The Tipton County Indiana Amateur Radio Club is an exempt organization under Section 501(c) (3) of the Internal Revenue Code.

Just couldn't resist.

Ham News for Tipton County

You are invited to attend the March meeting of the Tipton Indiana Amateur Radio Club which meets the second Saturday of each month . The next meeting is Saturday, May 11 , 2024, at 8:30 am, at the Jim Dandy Restaurant on West Jefferson Street in Tipton.

Executive Board meets the first Friday of each month Also at Jim Dandy at 8:30 AM. Unless otherwise noted.

Officers: Louie Wolford (k9qcb), President, Paul Kennedy (kd9iqh) Vice President, Larry Crowder, Treasurer(k9lwc), Ron Adamson (WA9YJZ) Secretary, John Ankrom (kg9ja) Trustee

Standard Stuff:

The beginning of each net starts with an attendance of sorts of the local RACES/ARES membership. Have you wondered about RACES/ ARES and how to learn more? The ARRL has these courses if you are interested:

EC-001: Introduction to Emergency Communication

EC-016: Public Service and Emergency Communications Management for Radio Amateurs

PR-101: Public Relations 101 for Radio Amateurs

Look into them, they can be helpful.

If you think it is an emergency call 911. Don't wait, don't think it will pass. It's better to look a little silly than to become dead.

Notes from the Editor:

Oh! Oh! From April A VINTGE Transistor schematic

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Indiana Section ARES® Nets

The Indiana Section ARES® HF net is held on 7.272 +/- during the summer months, every Sunday at 5 PM EDT.

Net Manager: Jim Moehring, KB9WWM. Email: servo300@aol.com

- [***Indiana ARES® HF Net Script***](#)
- [***Indiana Section ARES® HF Net Log***](#)

The Indiana ARES® HF Digital Net is held every Wednesday at 8:30 PM Eastern Time except the second Wednesday of the month on or about 3.583 MHz using Olivia 8/500.

Net Manager: Matthew Becdol, W9SOX

ARE YOU UPGRADING YOUR LICENSE THIS YEAR?

- EXAM SESSION

05/21/2024 | [ANDERSON IN 46016-2238](#)

Sponsor: Anderson Repeater Club
Location: Madison County EMA EOC
Time: 7:00 PM (Walk-ins allowed)
[Learn More](#)

- EXAM SESSION

06/18/2024 | [ANDERSON IN 46016-2238](#)

Sponsor: Anderson Repeater Club
Location: Madison County EMA EOC
Time: 7:00 PM (Walk-ins allowed)
[Learn More](#)

- EXAM SESSION

07/16/2024 | [ANDERSON IN 46016-2238](#)

Sponsor: Anderson Repeater Club
Location: Madison County EMA EOC
Time: 7:00 PM (Walk-ins allowed)
[Learn More](#)

- EXAM SESSION

07/27/2024 | [NOBLESVILLE IN 46060-1624](#)

Sponsor: Central Indiana ARA/ HCRACES
Location: Sheriff's Training Room
Time: 10:30 AM (No Walk-ins / Register or Call ahead)
[Learn More](#)

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- EXAM SESSION

08/20/2024 | [ANDERSON IN 46016-2238](#)

Sponsor: Anderson Repeater Club
Location: Madison County EMA EOC
Time: 7:00 PM (Walk-ins allowed)
[Learn More](#)

- EXAM SESSION

09/17/2024 | [ANDERSON IN 46016-2238](#)

Sponsor: Anderson Repeater Club
Location: Madison County EMA EOC
Time: 7:00 PM (Walk-ins allowed)
[Learn More](#)

- EXAM SESSION

10/15/2024 | [ANDERSON IN 46016-2238](#)

Sponsor: Anderson Repeater Club
Location: Madison County EMA EOC
Time: 7:00 PM (Walk-ins allowed)
[Learn More](#)

- EXAM SESSION

10/19/2024 | [NOBLESVILLE IN 46060-1624](#)

Sponsor: Central Indiana ARA/ HCRACES
Location: Sheriff's Training Room
Time: 10:30 AM (No Walk-ins / Register or Call ahead)
[Learn More](#)

- EXAM SESSION

11/19/2024 | [ANDERSON IN 46016-2238](#)

Sponsor: Anderson Repeater Club
Location: Madison County EMA EOC
Time: 7:00 PM (Walk-ins allowed)
[Learn More](#)

- EXAM SESSION

12/17/2024 | [ANDERSON IN 46016-2238](#)

Sponsor: Anderson Repeater Club
Location: Madison County EMA EOC
Time: 7:00 PM (Walk-ins allowed)
[Learn More](#)

Updaters Note: HamExam.org Amateur Radio Practice Exams

At: [HamExam.org: Free Amateur Radio Practice Tests](#)

Or for Technician Class: [Ham Radio Technician Class Practice Test \(updated 2020\) \(mometrix.com\)](#)

And General: [Ham Radio General Class Practice Test \(updated 2020\) \(mometrix.com\)](#)

OR: **ON THE ARRL WEB SITE**

Amateur Radio Websites that are supposed to be “Handy” From: H. Ward Silver: Part of the Ham Radio for Dummies Cheat Sheet.

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ARRL- Many useful regulatory, educational, operating, and technical items and links

AC6V and DX Zone – General-interest websites with many links on all phases of Ham Radio

QRZ.com - Callsign lookup service and general-interest ham radio portal

eHam.net – News, articles, equipment swap and shop, product reviews, and mailing lists

Radiowave Propagation Center - Real-Time information on propagation and solar data

Space Weather Prediction Center - - Real-Time information on space weather and radio communications

TAPR (Information on Digital modes) - Information on Digital modes and software-defined radio (SDR)

AMSAT - Main site for information on amateur satellites

WA7BNM Contest Calendar - Contest calendar and log due dates

YOTA (Youngsters on the Air) – World-wide group for student and young adult hams, based in Europe

DXMAPS.com - Collection of real time maps showing worldwide activity on any amateur band

DXSummit – Worldwide DX spotting network

You may or may not know the ARRL works with several agencies in the public service area. Many of these groups accept volunteers. If you have some free time and would like to be more active in the community here is a partial list of agencies that may need volunteer help.

- **American Red Cross+**
- **Association of Public-Safety Communications Officials-International (APCO-International)+**
- **Boy Scouts of America+**
- **Citizen Corps (Department of Homeland Security)+**
- **Civil Air Patrol (CAP)+**
- **Federal Emergency Management Agency (FEMA)+**
- **National Volunteer Organizations Active in Disaster (NVOAD)+**
- **REACT International Inc.+**
- **Salvation Army & SATERN+**
- **SKYWARN (National Weather Service)+**
- **Society of Broadcast Engineers (SBE)+**
- **United States Power Squadrons+**
- **Quarter Century Wireless Association, Inc.**

Copied from the ARRL website

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10 Handy HAM Radio Websites:

ARRL, AC6V, DX Zone, QRZ.com, eHam.com, Radio wave
Propagation Center, Space Weather Prediction Center, TAPR(Tuscon
Amateur Packet Radio), AMSAT, WA7BNM Contest Calendar,
YOTA (Youngsters On The Air)

New Stuff:

Interesting note, If you are bothered by Wasps... flying around the house or on your deck. Wherever you don't want them... spray them with soapy water. Make sure when you mix the dish soap into the water you get a good soapy mix. They will leave, it plugs up their ability to breathe. When you spray them... be careful.

Keep in mind Kirchhoff's Voltage Law where the sum of the potential rises and drops around a closed loop is zero.

Voltage divider rule: $V_x = R_x * V / R_t$.

So, the voltage across any resistor (or combination of series resistors) is equal to the value of that resistor multiplied by the potential difference across the series circuit and divided by the total resistance of the circuit.

Voltage is always the same across parallel resistors.

Conductance: The total conductance of a parallel circuit is equal to the sum of the conductance's of the branches. Conductance is the reciprocal of resistance

Conductance "G" = $1 / R$, $G_t = G_1 + G_2 + G_3 \dots G_n$

And $G_t = G_1 + G_2 + G_3 + \dots G_n$ or $1/R_t = 1/R_1 + 1/R_2 + 1/R_3 + \dots 1/R_n$

I have forgotten something: Current Divider: $I_1 = (R_t / R_1) * I$

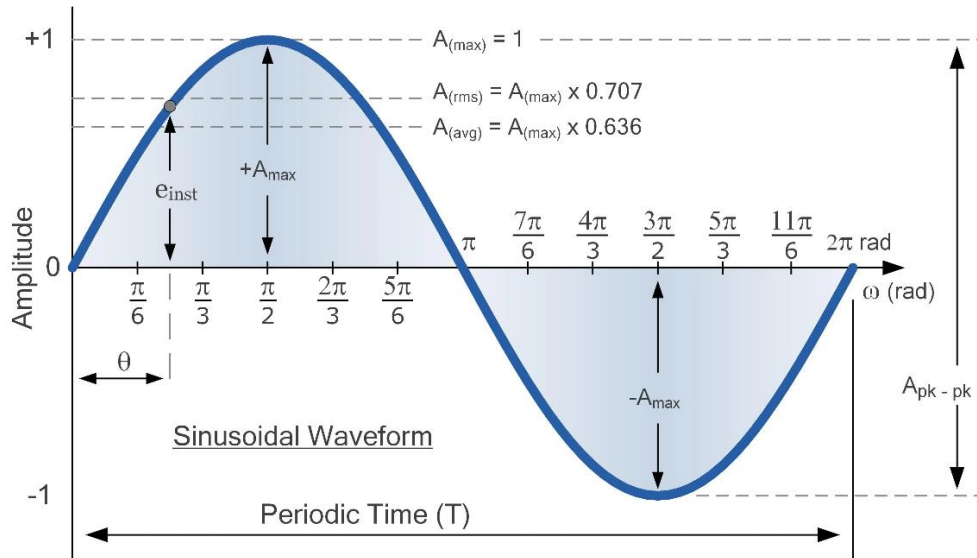
In parallel circuits...

And: $I_1 = (R_2 * I) / R_1 + R_2$ Note where R_1 and R_2 are in each formula.

And: $I_2 = (R_1 * I) / (R_1 + R_2)$

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For a minute I am going to change topics. We have been working with DC circuits. We are now going to look at AC Circuits for a while.



Pretty diagram, this shows the way an AC voltage moves. As the generator spins, the voltage starts at 0, then goes halfway around. To where you see π , this is 180 degrees from start. Then, as the generator goes on around, the voltage is going the other way until it gets back to 0. Another way to look at this is to take a circle and break it at zero and take one end of the break and stretch it out and you get this waveform. Big wup! And, if you wonder about the way this is divided as in $\pi/6$, $2\pi/6$, etc. these are called radians and is just a way to divide the circle.

So, AC current can be stepped up or down. You have seen transformers on power poles. Well, you can do the same thing inside a box.

AC increases and decreases in power as the wave goes up and down. AS you look at the curve above, it goes up, this is called 90 degrees or $\pi/2$ then down through π at 180 degrees on down to $3\pi/2$ or 270 degrees and back up to 2π radians or zero. The faster it does this is called its frequency. AC also has some other things going on. You know about voltage and current. They both go down the wire at the same time and they can be in "Phase" or out of "Phase". In phase is like the above curve carrying both topics at the same time displayed on the same line. If they were out of phase there would be two curves, maybe the lines would be a little bit off from matching.

And, voltage, voltage is measured from the zero line in the middle to the top (peak) of the sine wave curve. The line where you see the +1 indicates +1 volt.

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Lastly:

“To earn a lot of money you must know something. If you wait for someone to teach you everything, you are in line with everyone else. Amateur Radio is a way to self-learn calling on “Elmer’s” when needed. This increases your skills, technical knowledge and abilities. You are in charge and you are ahead of the competition.”

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