



SEATTLE, WASHINGTON

K7LED RELAY

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AN ARRL AFFILIATED CLUB

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The Mike & Key net meets each Sunday morning at 10 a.m. on 3,930 Khz with Novice and CW check-in on 3,730 Khz and VHF on 146.58 Mhz and K7LED/R 52.37—53.37.

Club meets the third Saturday of each month at 10 a.m. at "The Good Neighbor Center" located at 305 S. 43rd St. in Renton, which is across the street from Valley General Hospital.

MEMBERSHIP: 84

ACTIVITIES

November 15	Board Meeting 7:30 a.m. — OMNI Restaurant Business Meeting 10:00 a.m. Program — Oscar Satellite Communications by Al, WA7TIB
December 6	Christmas Party

ACTIVITIES MANAGER REPORT

The October meeting at the Ste. Michelle Barrel Room was a great success. There were 36 members present with 20 guests making a total of 56 who took the tour. Many brought their cheese and other snacks and enjoyed the friendly contacts with other members while tasting the finished spirits of Ste. Michelle. Our member Ernie Davis (now W7AWW) drove up from Portland with a guest for the meeting. The feeling expressed by many in attendance was that this event should be an annual event. What do you think? Is there some other place where we can hold a meeting and enjoy the social contacts with other members in a relaxed atmosphere? Perhaps this type of affair (meeting) could be at some other time than the regular (business) meeting days. Please express your ideas and opinions to a board member. Your suggestions are always welcome and they serve as information in planning the future activities of our club.

BOARD MEETINGS - The board regularly meets at the "OMNI Restaurant" at 4701 S. 188th Street (not far from the Red Lion). The members arrive beginning at 7:30 A.M. when some will have breakfast and socialize for a while. The discussions begin about 8:15 and all members are welcome to sit in and listen or participate. There are extra tables and you are not required to order anything. The meeting is in the back room of the restaurant. Our Sunday morning net has one very regular participant. You can count on him being there each week and taking over net control when the regular net control operator "forgets" to take over. We therefore present Les -WN7NXC with a "Gold Star" for his faithful service to the M & K net. May there be more members like him!!! Thanks Les.

The survey of members interest which I conducted recently has indicated that there is a definite interest in integrated circuits and computers in communication. This same interest is also shown by a large number of radio amateurs throughout the nation. There is mounting evidence that more and more microprocessor controlled devices are finding their way into the ham shack.

In order to provide you with knowledge and information about this fascinating and growing aspect of our hobby, we are planning a three-program presentation which will begin with an introduction into computers, including logic and digital integrated circuits and concluding with a program of demonstrations of the microprocessor controlled computers used in amateur radio. The first of these programs will be presented at our December meeting. More details will be presented in the next issue of the "Relay".

WE ARE NUMBER ONE! Dennis, KA7IVQ, one of our newest members, called ARRL the other day and learned that we were top in class 7A at the last field day. There were 24 entries in class 7A. Officially we were credited with 11,928 points with 4005 contacts. Pennsylvania Wireless Association was second with 11,808 points. This year field day set a new record with 1731 entries and 25,451 operators. By comparison, the Tacoma Radio Club had 3,283 contacts and 9448 points, good for second in class 9A. A big CONGRATULATIONS to all who participated and made this event a great success. See November QST for full field day story.

NOVEMBER MEETING Al Jensen, WA7TIB, our president will present a program on Amateur Satellite communications via OSCAR.

Activities Manager,
George, N7BT



THOUGHT I WOULD SHARE SOME RECEIPES WITH YOU THAT I RECEIVED FROM SEVERAL OF THE "BETTER HALVES".....

RECIPE FOR BOILED WIFE

Marge Rembaugh

TAKE.....one cool, fresh, good-natured wife.
ADD.....three small children, a yelping dog and a cranky neighbor.
BLEND....in equal parts of heat, humidity, dust and stale air
BASTE....with annoying phone calls, spilled milk, skinned knees, doctor appointments that won't keep, a big ironing to do....and jelly smeared on the rug.
TOP.....with a splitting headache.
LET.....mixture simmer in a 98-degree home for 10 hours, or until boiling point is reached.
TEST.....by arriving home cool from your air-conditioned office with the cheerful greeting: "Have a nice day?" Stand back.

CRUNCHY APPLE CAKE

Bev Nelson

For those of you who hate to peel an apple.....

Combine 2 cups sugar and 4 cups coarsely chopped apples with SKINS. Separately beat 2 eggs, 1/2 cup vegetable oil, & 2 t vanilla. Add to apple mixture.

Mix 2 cups flour, 2 t baking soda, 2 t cinnamon, 1 t salt and 1 cup chopped walnuts.

Mix together and bake at 350 for 1 hour. Grease a 8½x11 pan.

QUESTION - HOPE YOU CAN SUPPLY THE ANSWER....How do you peel an egg easily without peeling away half of the white after it is hard boiled?

VOLUNTEERS NEEDED - Need some help in the kitchen for the Xmas Party. I promise no dishpan hands.....

WATCH FOR THE DECEMBER ARTICLE. SHOULD RING A BELL WITH SOME OF YOU LADIES

IT HAS BEEN SUGGESTED THAT WE COLLECT OLD NEWSPAPERS AND PUT THE MONIES TOWARDS THE LADIES PRIZES AT THE BANQUET. WHAT DO YOU THINK?

BULLETIN.....BULLETIN

Nobody minds a man having a morning eye-opener and it's OK to have a bracer around 10 AM and a couple of drinks before lunch. And a few beers on a hot afternoon to keep a man healthy or at least happy. And, of course, everyone drinks at a cocktail hour. And a man can't be criticized for having wine with his dinner, a liquor afterwards and a hiball or two during the evening - but this damn business of SIP, SIP, SIP, all day long HAS GOT TO STOP!

"UNION HILL ANONYMOUS"

A SHORT COURSE IN BASIC ELECTRICITY

By Megga Watt

Some people are content to take most anything for granted.. They'll flip a switch, turn on a light, and never ask "how come?". I am not that way - I must know why things work. If I cannot find out from some technical handbook, then I combine such information as I already have with SIMPLE LOGIC. I want to share some of my knowledge with you.

1. Most electricity is manufactured in power stations around dams. It is fed into wires which are then wound around large drums.
2. Some electricity, however, does not need to go along wires. That used for lightning for example, and in portable radios. This kind of electricity isn't generated but is just lying around in the air loose and disconnected.
3. Electricity makes a low humming noise. This noise may be pitched at different levels for use in doorbells, telephones, and electric organs.
4. Electricity has to be grounded. That is, it has to be connected to the ground before it can function, except in the case of airplanes, which have separate ways of doing it.
5. Although electricity does not leak out of an empty light socket, that light socket is nevertheless live if you happen to shove your finger in it when the switch is on. So if it isn't leaking, what else is it doing?
6. Electricity is made up of two ingredients, negative and positive. One ingredient travels along a wire covered with white plastic and the other goes along a wire covered with black plastic. When these two wires meet together in what is called a plug, the different ingredients are mixed to form electricity.
7. Electricity can be stored in batteries. Big batteries do not necessarily hold more electricity than small batteries - in big batteries the electricity is just shoveled in, while in small batteries (transistors) it is packed flat.
8. Light switches control a small clamp or vise which grips the wires very hard. This prevents electricity from passing through but when the switch is flicked on, the vise is relaxed and the electricity travels to the light bulb. Here is a bare piece of wire called a filament and here also for the first time we can see electricity. It is in the form of a spark which is enlarged many hundreds of times by the curved bulb which is made of magnifying glass. They have a limited life because when the heat inside converts all the oxygen to moisture, it quenches the spark.
9. Fuse wire is manufactured too thin. Here is a hint if you have trouble with thin fuse wire that won't pass electricity. A sturdy heavy wire is available in most hardware stores for a very cheap price, which, if inserted correctly, will pass much more electricity than a fuse wire and won't burn out so often. I know because I have tried it many times even though the clothes dryer burst into flames once - the fireman said it was getting too much electricity - I still have many good electrical machines working everyday.
10. I have not explored how to make electricity jump up and down in neon signs, how a toaster knows when to pop up toast, and how does an English-speaking computer talk to a French computer when they use different electricity voltages?

11. What makes electricity colored so they can use it in traffic lights? Where does cold electricity come from for use in freezers and refrigerators? I don't know the answer to why radio and televisions operate. Someone said they do it with electricity but I doubt it because there are no wires from my house to the television station that I know of.

These and other questions remain to be answered, but for what it is worth, I am happy to share my knowledge with you and I hope you are successful because of this experience.

SHORT BURSTS.....SHORT BURSTS.....SHORT BURSTS.....SHORT BURSTS.....

Thanks, George, you did a good job setting up the winery tour. Maybe we should do it again next year!

Hal, N7NW, the refreshments you served at the last meeting were fantastic.

Did you get rid of your "ring around the collar", Jim, N7MBY?

I've heard of "Shot Gun Weddings", but isn't using two meters to get the preacher to the wedding on time, going a bit to far Vern?

Heard that Clay tied the knot. CONGRATULATIONS!

INVITATION-- Hedberg's are having their 2nd annual Christmas party on December 20th at 8:00 P.M. Open house - B.Y.O.B. and food to share. YOU ARE ALL INVITED.

AD7G had a headache after the meeting - what was that about recognizing the glass of a lush?

After making the rounds of all the tables sampling what everyone else brought for lunch N7AMX didn't need dinner.

K7WTC couldn't come for the wine -- he stayed home and played in bed -- all ten of them.

I thought grapes that wine is made from were supposed to be bitter - those were sweeter than any Thompsen Seedless I ever had.

A first? Vern, W7ZLW, used the 80/20 autopatch to remind the minister he was almost late to perform the wedding ceremony for Vern's daughter's wedding. HAM RADIO TO THE RESCUE!!

One table, where the CW men were, certainly liked the wine - they wanted more than the guides would give them so they went upstairs and bought out the wine shop.

OPERATION UPGRADE

UNITS OF MEASUREMENT

THINK METRIC!!

W7JWJ

Every measurement, whether it be a distance, a weight, an interval of time, requires two things: First, a number and second, a unit. Although there are numerous different units, each one can be expressed in terms of not more than three special units. These three are called fundamental units and are the units of length, mass and time. All other units are called derived units. There are in general use two widely used sets of fundamental units: (A) The Metric and (B) The English. Throughout the civilized world, scientific observations are nearly always expressed in terms of metric units. At the present time the United States is slowly converting the English system (or phasing it out) to the more common metric system. 90 percent of the countries of the world are now on the Metric system.

In electronics use is made of the Metric system based on the Standard Meter as the unit of length, the Standard Kilogram as the unit of Mass, and the Second as the unit of time.

When the standard Meter was first devised it was intended that it have a length equal to one ten-millionth part of the distance from one of the earth's poles to the equator. The standard meter is usually divided into 100 equal parts. Each of these parts is called one Centimeter. The Centimeter is further divided into ten equal parts. Each of these parts is called the Millimeter. The Millimeter is further divided into 1000 equal parts. Each of these parts is called a Micron.

In the United States the Yard has been used as the standard unit of length. By an act of Congress in 1866 the standard yard to be used legally in the U.S. was defined as 3600/3937 part of a standard meter. The Yard may be divided into three equal parts, each of which is called the Foot. The Foot may be divided into 12 equal parts called the Inch.

The standard unit of mass is the Kilogram. The Kilogram is divided into one thousand equal parts called Grams. One Gram weighs about the same as the U.S. Nickel (Ni; at. wt., 58.69; at. no., 28).

The standard pound is defined in terms of the standard Kilogram by the relation that its mass shall equal 0.4536 Kilograms.

Three kinds of time are recognized by astronomers; First, Sideral (Sidereal) time. The second is apparent solar time and the third is mean solar time. The last mentioned is the time used in civil life and in this classification there are 3600 seconds in one hour, 24 hours in one day, and 365.241 days in the tropical year, or 31,556,822 seconds in one year. The tropical year is defined as the time between two successive passages of the vernal equinox by the sun. Since tropical years vary slightly, the second is defined as; $1/31,556,825.9747$ part of the tropical year 1900.

The chief advantage of Metric units over English units is that all units are divided into 10, 100, or 1000 parts. This enables fractional distances and masses to be expressed as decimals. Decimals are easier to manipulate in the addition, subtraction, multiplication and division of two or more quantities. So think Metric! It's coming, and should have been here a long time ago.

MIKE & KEY AMATEUR RADIO CLUB
 10TH ANNUAL POTLUCK DINNER/DANCE/XMAS PARTY

WHERE: McMICKEN HEIGHTS IMPROVEMENT CLUB
 3730 South 166th
 Seattle, Washington

WHEN: December 6, 1980

TIME: 6:30 to 7:30 Attitude Adjustment
 7:30 to 8:30 Dinner
 8:30 to 12:30 Dancing

\$\$\$\$: \$4.00 per person
 Ham, scalloped potatoes & ice provided
 B.Y.O.B. AND YOUR APPETITES

MUSIC PROVIDED BY: MUSIC MAKERS DANCING MACHINE

Over 3,000 tunes for your dancing and listening enjoyment.
 They provide all the music for Longacres, just to name one.

AFTER 5 DRESS & GUESTS WELCOME

FUN, COMPANIONSHIP, FOOD THAT IS FANTASTIC! MUSIC FOR EVERY MOOD.
 WHAT MORE COULD YOU WANT!

Mail \$4.00 for each person in your party and the lower portion
 of this flyer to: Jan Hedberg, 20904 N.E. 77th St., Redmond, WA.
 98052. Phone: 883-8535 RESERVATIONS IN BY NOVEMBER 29th.

LIST TOTAL NUMBER ATTENDING: _____

Enclosed is my check for \$_____ payable to M&K AMATEUR RADIO CLUB.

I will be bringing the following potluck dish. PLEASE CHECK ONE.

<u>HOT DISH</u>	<u>SALAD</u>	<u>APPETIZERS</u>	<u>DESSERTS</u>	<u>ROLLS & BUTTER</u>
Meat casserole _____	Green _____	Relish plate _____	Cake _____	_____
Vegetables _____	Jello _____	Other _____	Pie _____	_____
Other _____	Fruit _____		Cookies _____	_____
	Veg. _____		Other _____	_____
	Other _____			_____

CALL _____

SIGNATURE _____

OCTOBER MEETING: A short business meeting was the beginning of a very enjoyable tour of Ste. Michelle Winery in Woodinville. The business meeting centered around announcements of Christmas parties, both the club one on December 6 at McMicken Heights and the Second Annual Hedberg Christmas Party on December 20. The club will purchase and sell buttons with the club logo on them. The money raised will go into the Raffle Fund. The question of the 6M-75 link for the net Sundays was tabled for discussion in the November meeting for lack of time. The rest of the time was spent on tasting and talking. The turnout was fantastic and I'm sure all had a good time.

HAPPY BIRTHDAY

OCTOBER

4 - Dennis Shirrel K7DCG
10 - Joe Fannin KB7FL
17 - Deborah De Jong N7AVO

17 - Al Takacs WB7NXI
22 - Ralph Cornell WA7GHZ
26 - Trisha Thompson KA7EKU

NOVEMBER

4 - Ken Rau K7YR
7 - Diana Becker

10 - Mary Lewis W7QGP
14 - Jim Aeschliman WB7AHD

MIKE AND KEY AMATEUR RADIO CLUB
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ADDRESS CORRECTION REQUESTED

FIRST CLASS