

**K7LED • RELAY**



**VOL. 4 NR. 6**

**OCT 1976**

CLUB OFFICERS

President.....WA7WMC.....Clay Freinwald  
Vice-President.....WA7TOM.....Dave Grant  
Secretary.....WA7WMD.....Kathy Freinwald  
Treasurer.....WA7TIB.....Al Jensen  
Activities Manager.....W7JIE.....Gib Gibson  
Radio Officer.....K7IPQ.....Pete Policani

TRUSTEES

Ken Rau, K7YRQ                      Ken Jackson, K7PZX                      Jim Strang, W7GPW  
Pete Hedberg, K7WTG                      Chris Holt, WA7RJW

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The K7LED Relay is the official publication of the Mike and Key Amateur Radio Club, Inc., 750 South 317th, Federal Way, Wa. 98003. Articles for publication should be addressed to Karon Policani, 750 South 317th, Federal Way, Wa. 98003. Deadline is the 20th of the month preceding date of publication. Articles may be quoted fully or in part without prior permission provided the K7LED RELAY is credited.

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HAPPY BIRTHDAY - OCTOBER 1976

October 3    Kathy Freinwald, WA7WMD  
October 4    Dennis Shirrel, K7DCG  
October 6    Larry Davis, WB7AEH  
October 20    John Haworth, K7SRX  
October 20    Mark Avakian, WA7FLI  
October 22    Ralph Cornell, WA7GEZ

COVER ARTWORK: JANET PATJENS WA7WMB

General Business Meeting Minutes 7-17-1976

Meeting was called to order by Clay Freinwald, President.

Announcements: Karon Policani is the new K7LED Relay editor. The Budget Committee ok'd the purchase of the new chairs. We have two Bylaw additions to be voted on at the next meeting. W7DK's hamfair is to be held on August 21 and 22. K7YRQ will be holding a Seafair meeting on July 20th.

The members passed a motion to pay K7BNN \$50 to help defray the cost of the gas to bring his well drilling rig to Field Day and to reimburse WA7RJT for 30 gallons of gas used by his generator during Field Day weekend.

Treasurer's report a starting balance of \$795.10, income of \$53, outgo of \$37, an ending balance of \$811.10 with a raffle fund of \$151.56. Bills totaling \$23.24 were approved for payment.

Bernice WB7ALA, Jack WA7GOJ and Bob VE7AZT/7 all received 100% yes votes on their applications for membership.

W7JIE reported on the following: K7YRQ is taking care of communications for Seafair parades. Next no host dinner is August 4. Dinner is served from 6 to 8 pm. VE7AZT/7 is the club's new contest chairman. WB7DBZ is making arrangements for a club outing to the Cirque Theatre. WN7ACM is working on a trip to Blake Island. There will be a field day meeting July 24. Gib is working on a field trip to the Seattle 911 Control Center. Anyone interested in helping with Intruder Watch contact Gib for details. K7KOT and group will be using W7LYE for a contest call and extended an open challenge to the Mike and Key Club to beat them in any VHF contest.

Karon reported on the Auction. She will check to see if non-amateurs not participating in the auction may be present. A motion passed to allocate \$85. in a check made payable to the Seattle Center for rental of the Olympic Room for October 2. A motion passed to give Karon authority to move the auction to a place of her choice if the Seattle Center location cannot be used.

The Radio Officer drew WA7LNQ's name to use the club call for the next month.

Karon P. needs input for ladies activities for the Division Convention. Swap and shop is now on the club's 75 meter net, Sunday mornings.

Membership Chairman has contacted 20 new hams in our area.

Meeting adjourned at 12:10 pm.

APPROVED: 9-18-1976

BOARD MEETING MINUTES 8-21-1976

Meeting was called to order by President Clay Freinwald. Board members present were: Clay and Kathy Freinwald, Dave Grant, Al Jensen, Chris Holt, Jim Strang, and Pete Policani and M. L. Gibson.

The Board approved applications submitted for membership for WA7CTB, WB7DWF, K7UCQ, WN7CBL and WB7ETI.

The Board voted to file a complaint with the ARRL Convention Committee about them applying for the special call of NW7ARL instead of using K7LED for the convention talk in station.

It was moved, seconded and approved by vote to replace all the Club's convention delegates with members who will report back to the Board about convention activities.

September Board meeting will be held September 11 due to interference from the Salmon Derby on September 18.

Board wants recommendation from membership as to whether to have minutes read at each general business meeting or have them published in the Relay and posted at each meeting.

The Club auction will be closed to the public. Buyers and sellers must have an Amateur license. Club does have the license from the city, and a contract for the room.

Kathy was asked to send a letter to the Seattle Park Department requesting permission to use Sandpoint for field day 1977.

K7BNN was selected as our outstanding Field Day participant.

Karon was given permission to collect for the cost of printing the relay in advance each month.

It has been suggested the club sponsor novice classes this fall. Kathy will request information from the ARRL.

The club picnic has been cancelled for this year due to a lack of summer and time.

Meeting was adjourned at 9:15 AM.

APPROVED: 9-18-1976

WA7NXE and WB7AYU are both sporting new vehicles.

Congratulations Kathy - what a rotten way to spend your Birthday. Everyone wishes you a short stay in the hospital and a quick recovery.

K7IPQ has joined the ranks in the "I didn't realize the tank was so low" category. At least he made it off the Freeway and to within walking distance of work. He was only 20 minutes late. I'm glad I didn't have to listen to the language - I'll bet the air was blue.

Freinwald's tower and beam are up - not too bad - it only took two years.

Editor is still looking for input to the paper. We are fast running out of material - get the pens or typewriters busy.

SHORT BURSTS!

MIKE AND KEY ANNUAL AUCTION - October 2, 1976

October 2, Mike and Key is holding its biggest auction todate. We have rented the Olympic Room at the Seattle Center Northcourt for this event. Registration begins at 8 AM with bidding beginning at 10 AM. Sellers will be by order of registration. Closing time is 8 PM or whenever every item is sold, whichever comes first.

There will be a 50¢ registration fee for all buyer/sellers. The auction is open to all licensed amateurs. Since this is to benefit your club, mention it in every QSO - lets be sure those who do not attend don't do so out of ignorance of the event. Bring your surplus gear and your checkbooks.

There will be talk in stations on 147.81/.21 and 146.58 simplex, using K7LED/7. See you all there -- Karon, WA7WVJ

MIKE AND KEY ANNUAL CHRISTMAS PARTY - December 4, 1976

Before you wonder why we are already pushing Christmas, remember that there are only 2 more club meetings between now and the party.

This is one of many opportunities for club members, old and new, to get involved. Ken Jackson wants to hear from you and better yet, would appreciate you volunteering your services in whatever capacity you like. Don't wait to be asked. Remember, this is your club so if you want things done the way you would like, help do them.

There will be many committees: food, decorations, program, etc., and everyone is welcome so queue up and call Ken at 824-7388 after 6 PM weekdays or on WR7ABP/6 meters and WR7ACS/2 meters.

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Please check your membership cards, if you have one, to see when your club dues expire and then see Al, WA7TIB. We'd hate to drop anyone from the club because that person inadvertently neglected to pay his or her dues.

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Women's activities tended to fall by the wayside due to apparent lack of interest. Hopefully, we didn't hear from you because you were all occupied during the summer months. Now that fall is here, maybe you'd like to contact Jan. How many of you would like a tour of the Ste. Michelle Vineyards? Surely they must have a tasting room! -- See, write or call Jan Hedberg, WA7HWX, 20904 N.E. 77th St., Redmond 98052 - phone, 883-8535.

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Sue Needham, WB7DBZ, is waiting patiently for you to contact her if you are interested in a Cirque Theatre party. Response so far has been poor to say the least. Call 883-2775.

## MIKE AND KEY CALENDAR OF EVENTS

2 October -- M & K Auction. Seattle Center, Olympic Room, 10 AM  
Talk it up among all Amateurs and plan to attend this big bash of  
electronic equipment sales. Super swap meet!

8 October -- Monthly M & K Social Dinner. This one at Corben's  
Broiler, 17528 15th N.E., Seattle. This is across the street  
from ABC Communications. A waitress-type service for all hams  
starting at 6:30 PM. This dinner to be held jointly with the  
NW ARRL Convention Committee who will hold their monthly meeting  
at 8 PM. All are invited to attend both functions.

16 October -- General Business Meeting, United Way Center, Renton  
at 10 AM.

6 November -- Conducted tour of the Seattle Police Department  
Emergency Communications Center in the Public Safety Building.  
All M & K members will meet at 10 AM at the 3rd Avenue Entrance  
to the PSB and we go from there. Tour will last nearly one  
hour and is an excellent demonstration of computerized communi-  
cations serving the 911 requirements of a large city.

13 November -- Monthly M & K Social Dinner. Location probably  
in Tacoma or Federal Way. Details later.

4 December -- Annual Christmas Party. K7PZX in charge. Give Ken  
your ideas and lend a helping hand. McMicken Heights Community  
Clubhouse is the location. Music, food, dancing, fun, drinks,  
laughs, live theatre (of sorts), fun excitement -- the works.  
Call Ken and offer to help.

12 December -- No M & K Social Dinner this month -- yawl need a  
break sometime.

1 January 1977 -- A whole new year! Stand by for speakers,  
training films, guided tours, dinners, BANQUET and other goodies.

Added Activities -- Have been asked about hidden transmitter  
hunts, construction projects for the club, contests, dinner  
theatres, and other shindigs. Hey! I'm game for anything, only  
I can't organize and run 'em all. You wanna do somethin lemme  
know and together we'll figger out some way to cheat, lie, scheme  
and otherwise get the activity into action. 'S up tuh yew (hint  
-hint). C U at the Auction -- 73's Gib, W7JIE

FELLAS Want to get your lady interested in amateur radio?  
Have her read each edition of the Relay. Hand her a Mike to get  
her accustomed to the feel, then turn it on and let her talk.  
When she gets to the point where she always has something to add  
to the conversation, take away her Mike privileges. The severe  
withdrawal symptoms she suffers may be sufficient inducement to  
get her studying.

WARNING: If she gets her license, you may not be able to use  
your radios as often as you once did because she may have them  
all tied up.

QST! QST! QST! COOKS OF EITHER GENDER!

Mike and Key is compiling your favorite recipes so that we may put together a cookbook; the size and scope of which depends on you! There is no limit to the number of recipes you may beg, borrow or steal to submit -- just don't send us a previously published book.

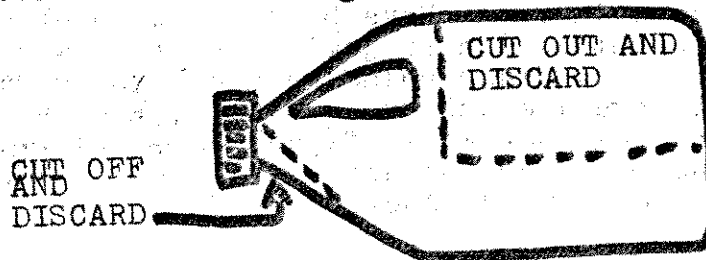
Surely Mom, Dad or Grandma, maybe even Uncle Sam, had a special bread, cake, cookies, turkey dinner or peanut butter sandwich recipe that's been passed down to you. Maybe you yourself are an inventor of secret sauces. We want how-to tips, tips for substitutions, special diet recipes for diabetics or persons on sodium restrictions.

Although this is a M & K project, other clubs are welcome to contribute and will be credited. Proceeds from the sales will benefit, in part, the 1977 ARRL N.W. Division Convention women's activities with the rest going towards Mike and Key Club women's activities, such as women's prizes for our annual banquet.

The sooner Jan receives your recipes, the sooner we can get our book put together. Please send complete, legible and edible recipes, preferably (but not necessarily) typed, with your name, call (if you have one) and address to: Jan Hedberg, WA7HWX, 20904 N.E. 77th, Redmond 98052.

A HINT FOR THE JUNK BOX ALA GIB

If you have a collection of "very valuable" articles normally stored in a box, jar, bag or something, you are usually pawing thru looking for electronic things that always elude your eyes. Here is a cheap device that might save a few cut fingers and perhaps a few cuss words for a more important occasion. Use an old bleach bottle or one of the gallon size plastic jugs and cut as shown.



When you need a part, dump the box into the jug, paw thru it with ease, then when you want to put it back, just dump the junk into the box thru the old top of the jug. Looks crazy but it works!

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Club members who are members of ARRL should be aware that the Club benefits by renewing your ARRL membership thru the Club Treasurer. You pay the same amount, but the Club receives \$1 on each such renewal from the ARRL.

HR REPORT -- U.S. Amateur population reached 279,253 at the end of August, up from 256,875 one year ago. There was an increase of 4,486 during August, with 3,249 of those licensed being new Novices.

Some WWV propagation information may survive. It appears that the 18 minute after the hour broadcasts, dropped July 1, will be reinstated by the Department of Commerce in the near future.

Some Amateur exams may have questions for which no valid answers are offered due to the many recent rules changes. Most of such questions are already known to the FCC and credit for a correct answer is automatically given, whether it is answered or not.

However, to be on the safe side its a good idea to call the examiner's attention to such an item when you are taking an FCC administered test. In the case of a Novice exam with a volunteer examiner, the examiner is not supposed to look at the exam but should advise the examinee to note any problems in the margin of the answer sheet where the scorer in Gettysburg will notice it.

Propogation September 27-October 12. New solar cycle miniflare groups have continued to appear on the sun's surface with little warning. This activity is expected to continue, keeping the ionosphere stimulated into providing good or slightly better conditions through the forecast period. Seasonal effects continue to reflect the approaching October equinox and band conditions should continue their current improvement. Be especially alert during twilight periods as some very interesting DX paths may be open simultaneously on two or more bands. Only minor day-to-day variations with basically good conditions are expected during most of the period. September 29 to October 1 is the only predicted disturbance. Solar cycle 20 is now officially expected by government forecasters to bottom out early next spring. The sunspot upswing that follows should become evident as early as midsummer, with improvement relatively rapid thereafter. As for this winter, be prepared to do your DXing on the long waves.--HR REPORT

SHORT BURSTS!

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K7KOT and Linda have a third son, Brian, born early September. Something of reportedly ancient Scotch ancestry was a bad influence on a few unnamed persons at Milton-Freewater last weekend. VE7AZTurkey/7, the voice behind the great purple cabbage leaf, got hitched to a Karen on September 30 - we expect another application for membership to the club very soon from that quarter. Break her in right, Bob, you know females are welcome to the club, licensed or not. Organ and organist have been secured for the Christmas party - now we need a drummer to go with -- if anyone knows someone who might be interested, contact Ken - K7PZX. Whats all this about the club being on the move again? - Seems at least half a dozen club members are househunting and poor Kathy's been working frantically on an updated roster! Hear K7YRQ has a new toy on the low bands. Expect to see the old one at the Auction this Saturday.



## SWR - AN ARGUMENT THAT WILL LAST FOREVER!

Always SWR is a big issue--there are a dozen opinions among six hams -- and they are all probably right. But here's a little chart that might help you in some cases. The chart gives the percentage of efficiency if you know your SWR. In other words, if your SWR is 2:1 and your rig is 100 watts output from the final, you can easily determine that your losses are 11 watts. Not too swift! May take some correction to compete with the big guns. Shows up as heat in the feed lines and antenna.

<u>SWR Reading</u>	<u>Output %</u>	<u>SWR Reading</u>	<u>Output%</u>
1.1	100	3:1	75
1.2:1	99	4:1	64
1.4:1	97	5:1	56
1.6:1	95	6:1	49
1.8:1	92	8:1	40
2:1	88	10:1	33
2.5:1	82		

M.L.Gibson/W7JIE

## SWAP AND SHOP

FOR SALE: Robot 70 SSTV Monitor - \$150; Robot 80 SSTV Camera - \$150; Heath SB-620 Panadapter - \$75; Heath IB-1100 Frequency Counter - \$100; Pickering KB-1 Morse Code Keyboard - \$100.  
Rick - K7GGD, 285-1025 Evenings

FOR SALE: Motorola VHF 50 MHz 1 RX-PA8628 \$5  
1 RX-TA111 \$10  
2 TX-TA204 30/50 \$5

Motorola VHF 150 MHz  
2 TX- A-type/60 Watt w/final \$15  
1 TX- A-type/60 Watt as is \$ 5  
1 RX- G-type 2channel w/Cor \$30  
Motorola UHF 450 MHz  
1 TU-112 Base Station Supply \$45  
1 Homebrew Base Supply \$15  
1 Desktop (L44AAB) Complete \$65  
2 TX- TA204 w/Final \$15 each  
2 RX- TU193() w/IF Xtal \$15 each

GE 1 Mobile 450-MHz T-power Complete w/acces. \$55  
GE 1 Mobile 150-MHz T-Power No control  
head, cables, etc..... \$35

## MISCELLANEOUS

1 Motorola T-power supply (TU596) \$35  
1 Motorola Tone Receiver (P9303) \$10  
1 Model 28KSR Teletype \$85  
1 Model 28ASR w/Dualto In Parts \$100  
1 Mainline TT/1 2 Rtty Demod. - Custom  
built...\$180

Contact Bill Blum - WA7000, 827-4403 After 1800 local, weeknights.)