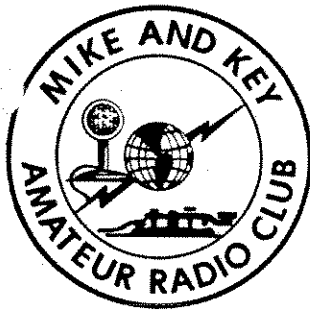


# K7LED RELAY



The K7LED RELAY is the Official Publication of the MIKE and KEY AMATEUR RADIO CLUB, P.O. Box 2121, Kirkland, Wa 98083-2121. The club meets the third Saturday of each month at 9:30 AM in "The Good Neighbor Center", 305 S. 43rd St., Renton, WA. All "HAMS" invited. The Mike & Key Net meets each Wednesday evening at 1930 hrs on 224.12 and 146.82-22 Mhz. The repeaters are linked. Your Check-in is welcome.

AN ARRL AFFILIATED CLUB LOCATED NEAR SEATTLE, WASHINGTON

VOLUME 17

MARCH 1989

NUMBER 3

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19415 SE 21st St.  
Issaquah, Wa. 98027

RELAY DEADLINE 4 APRIL 1989

**REPEATER FREQUENCY**

52.05 - 53.05  
146.22 - 146.82  
224.12



First Class

**BOARD MEETING**

FIRST TUESDAY  
OF EACH MONTH

**CLUB MEETS:**

18 MARCH 1989

**RENTON 10:00**

**UGN CENTER**

HEDBERG, PETE K7WTG  
20904 NE 77TH ST  
REDMUND  
WA 98053

BREAKFAST: 0730  
AT MITZEL'S IN KENT

COFFEE AND DONUTS WILL BE READY AT 0930

ANNOUNCING  
THE MIKE AND KEY AMATEUR RADIO CLUB  
ANNUAL AWARDS BANQUET  
APRIL 1, 1989

LOCATION -- BALLARD EAGLES  
5600 24TH N.W. , BALLARD

PROGRAM

NO HOST BAR -- 6:00 PM  
DINNER -- 7:00 PM  
PRESENTATION OF 1989 OFFICERS -- 8:00 PM  
ANNUAL AWARDS PRESENTATION-- 8:15 PM  
PRIZES -- 8:30 PM  
EVENING ENTERTAINMENT -- 9:00 PM TILL 1:00 AM  
DANCING TO POPULAR AND WESTERN MUSIC

REGISTRATION FORM

NAME \_\_\_\_\_ CALL \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE \_\_\_\_\_ NUMBER OF RESERVATIONS \_\_\_\_\_

PLEASE INDICATE NUMBER OF:

STEAK DINNERS \_\_\_\_\_ X \$8.00 = \_\_\_\_\_

CHICKEN DINNERS \_\_\_\_\_ X \$8.00 = \_\_\_\_\_

TOTAL = \_\_\_\_\_

CHECKS PAYABLE TO: MIKE AND KEY ARC  
C/O CHUCK STROEHER  
19415 SE 21ST STREET  
ISSAQUAH, WA. 98027

THE WASHINGTON CENTENNIAL STEAM-  
TRAIN DX-PEDITION!! OR  
I WAS THE CAUSE OF A SMALL PILE-  
UP!!

Learning to read at an early age gave me a big advantage a few days ago. The morning P-I had a small ad for "Riding the Centennial Train". From Wenatchee to Seattle. Well why not? Out came the VISA card and Monday the 27th of Feb. my wife and I were on our way. Of course we had to get up at 3:30AM, get to the King Street Station and be aboard the bus. Left Seattle at 5:30 east on Interstate 5. Over the Cascades at Snoqualmie Pass then on over Blewett Pass. Arrived at Wenatchee at around 8:30.

Exchanged our tickets for boarding passes. At 10:00AM sharp the 11-car train was underway. Pulled by steam locomotive #4449. Its a BIG dude. 7-foot drive wheels, 4 on each side, uses 100 gallons of water an hour and oil fired. Owned by the City of Portland but the head engineer was a S.P. man who does it because he "loves it"! Had over 200 school kids aboard which were left off at Leavenworth.

Picked up a common old diesel-electric "helper" to avoid smoke in the 7.9 mile tunnel.

All along the 156-mile route were crowds of people. Waving, taking pictures and videos. (Wish I had a penny for every frame taken!) Folks on warehouse steps, highway overpasses, in the fields, in the orchards, and anywhere you looked. Of course the 400+ passengers all waved back. After clearing the long tunnel and stopping for more water, we got underway again at 1:30PM heading west down the valley. When we cleared enough of the steepest hillsides, I fired up the 2AT on Mt. Pilchuk (146.92/R). Gave a call and the sky fell in!!

Literally it seemed everyone wanted a QSO with this train. So I did the best I could. Managed a total of 35 QSO's with the HH and a few small cards for logging. As we got further west out of the valley I tried my home club repeater, K7LED on 146.82 but it would not talk to me. Back to 146.2 for more. Then

we cleared Everett and started south along Puget Sound. Switched over to the 146.88 K7PF/R. Bingo!

More QSO's. Most popularity I've had in a long time!! Great billows of smoke and steam rolled across the water--it made a sight. More QSO's. Nearing Seattle I tried 146.82 once more but only got one possible signal!! No contact. Finally back to the starting point at King Street station at 4:30PM. What a ride! What fun! Five hams were aboard tho I don't have all the calls. No biggie as a DX-pedition, I'm sure but it was a pile of fun. Questions by the dozen from the passengers. I could have signed up a dozen for ham classes! Arrived back to the starting point at 4:30PM. A sad sight to see the end of the run but we had a great time. I'd do it again tomorrow if the opportunity comes. I won't wait 52 years for the next ride. You can bet on that. And the 2AT will be right there for another pile-up. Kinda neat the way FM cleans out the QRM on a repeater!! So long ole #4449. C U L. 73  
GIB W7JIE.

#### NEW LOCATION

Northwest Crystal Co.  
35355 N.E. 165th St.  
Seattle, WA 98155

Phone: 206-363-5273

#### A NO-PAPER PUZZLE!!

I HAVE A MANTEL CLOCK THAT IS SET FOR THE "WESTMINSTER" CHIME SEQUENCE. THAT IS, THE CLOCK STRIKES 4 "BONGS" AT THE QUARTER-HOUR, 8 "BONGS" AT THE HALF-HOUR, 12 "BONGS" AT THE THREE-QUARTER HOUR, AND 16 "BONGS" AT THE HOUR. THEN IT STRIKES THE HOUR. IN OTHER WORDS, AT 2 O'CLOCK, IT WOULD STRIKE 16 "BONGS" THEN 2 "BONGS" TO INDICATE THAT IT IS 2 O'CLOCK. MY QUESTION IS THIS: HOW MANY TOTAL "BONGS" WOULD MY CLOCK STRIKE IN A WEEKS TIME, STARTING AT SAY, 5 MINUTES AFTER 12 NOON ON SATURDAY AND GOING TILL 5 MINUTES AFTER NOON ON THE FOLLOWING SATURDAY? NOW TO MAKE IT INTERESTING, FIGURE THIS OUT WITHOUT USE OF PENCIL OR PAPER OR CALCULATORS! A SURE CURE FOR INSOMNIA. ANSWER: 960, 6720, 6888, 168, 1176, 7896, NONE OF THE ABOVE. CHOOSE ONE. W7JIE.

## PK-232 DCD

Recently, several new packeteers using PK-232 have appeared on our local duplex repeater which is dedicated to packet radio. This is one environment where the collision frequency should be very low since there are no hidden terminals. Almost immediately we noticed that the collision frequency had risen dramatically. After some investigation we discovered certain stations were almost guaranteed to be involved in stepping on in-progress packets. These stations were contacted and in all but one case they were new users of PK-232s.

We were very puzzled as there have always been some stations on the repeater using PK-232s with no apparent problems. The new stations were asked how their stations were configured and what method was used to get the DCD operation adjusted. We were very surprised at the answers we got. Every single one of the offending stations had set their station up exactly according to the instructions in the PK-232 manual. However, contrary to the advice given in the manual, none of these stations had configured their setup so that they could hear what was going on on the channel when the PK-232 was connected to the radio. None of these new operators knew what DCD meant, what it did, or why it was important that it should be working on a multiple access packet channel.

We obtained a PK-232 and manual to try and discover the exact nature of the problem. What we found was that although the manual is very complete and generally very well written, there are some areas where it leaves something to be desired. Specifically, in this case, the instructions given on 2-16 (we had manual PK232UG Rev. B9/86 for reference) for setting up the PK-232 and an FM radio for DCD operation are simply incorrect. If set up exactly as described, DCD will NEVER be asserted during a

packet transmission by another station on the channel! We had found the cause of our problems.

If you have a PK-232 and haven't already discovered this problem for yourself, please disregard the instructions in the manual for setting up a PK-232 and NBFM radio for 1200 baud packet operation and use the method presented here. All your packet neighbors will appreciate it very much.

The manual is quite correct in all respects EXCEPT where they discuss setting the DCD THRESHOLD control and receiver audio output level for proper demodulation and DCD circuit operation. The correct way to set these adjustments is as follows:

1. At least temporarily, arrange to be able to hear the receiver audio signal which is being sent to the PK-232.

2. Set the squelch circuit on the radio for normal squelched operation. The DCD circuit in the PK-232 is incapable of proper operation with unsquelched audio from the receiver.

3. While monitoring incoming packets, adjust the receiver audio so that the tuning indicator "spreads" fully when receiving a packet from the station on the channel which produces the LEAST amount of audio output level. There are several limiters in the PK-232 demodulator so louder stations will not be affected adversely by this.

4. Once the audio level is properly set, adjust the DCD THRESHOLD control on the PK-232 so that the DCD LED lights when there is a packet being transmitted by the station on channel which produces the LEAST amount of audio output from the receiver. Make sure, however, that the DCD LED is extinguished when there is no signal and the radio's squelch circuit has cut all audio from the receiver.

If the above procedure is followed, the PK-232 will properly hold off transmitting during a packet trans-

mission from another station and will not send acknowledgements to individual frames of maxframe greater than 1 packet while it is still being transmitted.

We hope PK-232 owners will find this information useful and take steps to assure that their DCD is operating properly. Multiple access packet channel throughput is severely degraded when DCD is not working. Eric Gustafson N7CL, from ARIZONA DESERT AIRE WAVES, October, 1988.....Gib W7JIE

DE THE PREZ.....

I want to take this opportunity to thank each and everyone of you for all of your support and encouragement during my tenure. There have been many memorable times for me and each of you has played a large part. Leaving this office is very hard for me, not only because I have enjoyed it so much, but because it is the very heart of how our organization operates. Oh, we don't all agree on each and every thing that the board has decided, but it's quite clear we are moving in directions that make this organization exciting. Being elected to office and entrusted with the responsibility to make decisions that affect the direction our organization takes is a heavy burden -- but being elected to the position of president is certainly the most gratifying!

Your newly elected president will need your total support during these times of change and I pledge myself to work with him in any way that will keep us on top.

The board members that I have served with during the past two years have been the best and their combined ideas and thoughts have made this organization what it is today. Their efforts have paid off to make this club the best.

Look around!!! You will see that the MIKE & KEY is Far the BEST!!  
73's Rick NUZZ

I have a 15 year certificate from the MIKE & KEY AMATEUR RADIO CLUB. I have been to lots of meetings, lots of Field Days, helped in kitchens at auctions, worked all Flea Markets, was Field Day Chairman have seen new members come and go and return and have been a Trustee for 4 years.

The years as Trustee have been the Best in that I knew what was really going on with the Club. I was more aware of the many things that only dedicated people strive for and with various backgrounds, education, classes, etc. build into something we should all be proud of.

K7LED's growth these past years, with mostly the same officers, has been outstanding. We have ARRIVED. 3 club repeaters, well known Flea Market, great Field Day results, Food drives, Picnics, Banquets, a Novice training program, delegates from the Club, Christmas, Bowling and Contests parties and a lot of 'eyeballs'.

We can now count among us most of all the Special Interest of Ham Radio. We have DXers, Ragchewers, CW & Phone people, VHFers of all types, TV Satellite, Packet, Public Service, Special Monitors and even more not always in the forefront.

I remember FOP BROWN well. I was a pall-bearer at his funeral. I feel SURE this is the kind of MIKE & KEY he had in mind all along.

Now we are about to begin a new slate of Officers. We now have a Long-Range Plan with the hope that our membership of 155 will continue to grow not only in number but in the attributes of Amateur Radio thereby securing our Hobby for the future. Jim K7PHZ, Chairman of Bd.

#### ROSTER

Please check the information on the roster included in this RELAY for yourself. If you have any changes, please contact Ray WA7EKH so he can make the necessary corrections for future publications. Especially check your call and telephone number. Thanks!!

## PUBLIC RELATIONS...

it begins at home

People often wonder why it is so difficult to bring more people into Ham Radio. Volumes of material have been written on the subject, and most every Ham-oriented publication has at least one column or article dealing with that subject almost every month. Last month I made the basic premise that the current Public Image of Amateur radio was a negative one. I take it by the lack of feed-back from any of you that you are either in total agreement with that statement or you choose to ignore the whole idea and hope that I go away. Well, no such luck on the latter, at least for this month!

Apart from our negative public image, we as Hams have another basic flaw to our general character that contributes to a lack of new blood coming into our ranks. Elmering. "Now, just wait a minute..." some of you will stammer. And indeed there are some very devoted "Elmers" out there. Unfortunately, there are not near enough. One reason? Perhaps the following para-phrased conversation on our own K7LED repeater expresses the idea better than I can:

Station A. "Repeater sure has been quiet the last few days."

Station B. "That's because Boeing is out, and there are not many people driving to work."

Station A. "But there still are a lot of other people going to work..."

Station B. "Yeah, but those are mainly retailing people, and most of them are usually not as technically oriented as Boeing People are..."

On the surface, there does not seem to be anything out of the ordinary, and I am sure that neither of the individuals involved in this QSO thought that they were stating anything other than a seeming fact. But it does bring up the premise for this particular article, that being, just who does make good "Ham Material"? If we have to rely on "technically-minded Boeing people", we have a problem. WE may have a

large pool of prospective Hams in this area, but the rest of the country is hurtin' for certain. Does it take somebody with a 72-Yagi moon-bounce array, or an ability to send CW at 60wpm to be a good Ham? Do we as Hams really communicate to the non-Ham public at large that Amateur Radio is something that they can do, whether they are a school teacher, gas station attendant, truck driver, or even an electrician? I think not.

We as Hams need to make a concerted effort to educate the non-Ham public as to what exactly it is that we do, and let them know in no too uncertain terms that they can do it, too; and then go to the extra distance and actively help them achieve their goal. We need to scratch from our brains the idea that Hamming is for the technically minded only. In this age of out-of-the box radios, you can be as technical as you choose to become. But that comes after you have gotten into the hobby, and is by no means a requirement for entry.

I have met few people who, on having gotten into the hobby, have not wanted to up-grade their licenses as well as their technical and operational prowess. That part of the hobby comes almost naturally, and even "non-technical" people seem to get caught up in the desire to learn.

So, let's get down to the basics. Get in there with just one other person. Bring them along into our ranks. And get together with young hams...help them along, help them to get their friends in the hobby. You might be amazed at what could happen. This is but one thing that each and everyone of us can do to help improve the image of our hobby.

Next month, a personal success story of my own. Until then.....

73's Allan WV7R

## ELECTION OF OFFICERS

Remember, the election of officers for the coming year will be held at the next meeting, March 18. You must be in attendance to vote. Make yourself heard!!

EXPENSE CATEGORY	1987 ACTUAL	1988 BUDGET	1988 ACTUAL	1989 BUDGET
<b>FIELD DAY</b>				
GAS	25.00	30.00	50.58	60.00
CAMPING	86.00	300.00	374.25	75.00
TRAILER FEES	71.00	75.00	33.45	75.00
TOW VEHICLE	18.00	20.00	3.71	20.00
PARTY EXPENSE	.00	50.00	70.00	75.00
SANI CAN (2)	70.00	150.00	109.00	150.00
MISC.	145.00	50.00	43.80	50.00
PARK RESERVATION FEES				100.00
<b>FIELD DAY TOTAL</b>	<b>413.00</b>	<b>675.00</b>	<b>685.59</b>	<b>530.00</b>
<b>PICNIC</b>				
FOOD AND POP	40.00	50.00	42.94	60.00
MISC. EXPENSES	.00	.00	25.00	40.00
<b>PICNIC TOTAL</b>	<b>40.00</b>	<b>50.00</b>	<b>67.94</b>	<b>100.00</b>
<b>CHRISTMAS PARTY</b>				
HALL RENTAL	50.00	200.00	.00	200.00
FOOD	61.00	75.00	200.00	125.00
PRIZES OR DECORATIONS	20.00	35.00	30.00	50.00
<b>CHRISTMAS PARTY TOTAL</b>	<b>131.00</b>	<b>300.00</b>	<b>230.00</b>	<b>375.00</b>
<b>BANQUET</b>				
GUEST DINNER *	.00	.00	.00	175.00
AWARDS *	160.00	160.00	160.00	400.00
PRIZES *	400.00	400.00	400.00	400.00
ENTERTAINMENT *	.00	.00	.00	30.00
MISC. EXPENSES *	90.00	90.00	90.00	50.00
<b>BANQUET TOTAL *</b>	<b>650.00</b>	<b>650.00</b>	<b>650.00</b>	<b>655.00</b>
<b>RELAY</b>				
POSTAGE	370.00	450.00	423.00	500.00
PRINTING	320.00	400.00	404.00	500.00
MISC. SUPPLIES	10.00	25.00	17.29	150.00
<b>RELAY TOTAL</b>	<b>700.00</b>	<b>1075.00</b>	<b>844.29</b>	<b>1150.00</b>
<b>GOOD NEIGHBOR DONATION</b>				
MEETING HALL RENT	200.00	200.00	200.00	50.00
MEETING HALL EXPENSES			200.00	600.00
<b>EXPENSE ITEM</b>				
	1987 ACTUAL	1988 BUDGET	1988 ACTUAL	1989 BUDGET
FLEA MARKET EXPENSE *	4500.00	4750.00	1405.65	5000.00
<b>TRAINING</b>				
	100.00	400.00	375.00	300.00
<b>REPEATER FUND</b>				
FUND (BOND PAY BACK)	500.00	1250.00	1250.00	.00
SITE RENTAL	360.00	360.00	360.00	360.00
PURCHASE Bkup REPTR.	.00	.00	.00	1500.00
REPAIR	50.00	100.00	46.00	150.00
MISC. EXPENSES	.00	40.00	54.05	150.00
<b>REPEATER FUND TOTAL</b>	<b>910.00</b>	<b>1750.00</b>	<b>2124.05</b>	<b>2160.00</b>
<b>MISCELLANEOUS</b>				
SEC. / TREAS. EXPENSE	25.00	25.00	23.00	50.00
STATE FEE	5.00	5.00	5.00	10.00
BANK SERVICE CHARGES	15.00	15.00	.00	20.00
TRAILER LICENSE	40.00	40.00	37.40	50.00
INSURANCE	250.00	300.00	248.00	350.00
WVWA MEMBERSHIP	10.00	10.00	10.00	10.00
MISC. PRINTING	5.00	100.00	152.40	400.00
PUBLIC RELATIONS	.00	50.00	50.00	50.00
GUEST SPEAKER	.00	50.00	.00	50.00
P.O. BOX	50.00	50.00	28.00	40.00
MISC/DUES ETC.	100.00	100.00	62.71	100.00
BADGES			65.99	100.00
TUKWILLA HALL RENT			94.00	.00
<b>MISCELLANEOUS TOTAL</b>	<b>500.00</b>	<b>750.00</b>	<b>767.56</b>	<b>1230.00</b>
<b>EXPENSE SUMMARY</b>				
FIELD DAY	413.00	675.00	685.59	530.00
PICNIC	40.00	50.00	67.94	100.00
CHRISTMAS PARTY	131.00	300.00	230.00	375.00
BANQUET *	650.00	650.00	650.00	655.00
RELAY	700.00	1075.00	844.29	1150.00
UGN DONATION	200.00	200.00	200.00	600.00
FLEA MARKET *	4500.00	4750.00	1405.65	5000.00
TRAINING	100.00	400.00	375.00	300.00
REPEATER	910.00	1750.00	2124.05	2160.00
MISCELLANEOUS	500.00	750.00	767.56	1230.00
<b>TOTAL EXPENSES</b>	<b>6332.00</b>	<b>10600.00</b>	<b>7158.98</b>	<b>12100.00</b>
* EXPENSES OF 1988 BUDGET ARE AS OF 2-28-89				

	1987 ACTUAL	1988 BUDGETED	1988 ACTUAL	1989 BUDGETED
INCOME CATEGORY				
DUES	975.00	1100.00	1674.00	1800.00
FIELD DAY RESERVATIONS				100.00
TRAINING	.00	300.00	.00	.00
PLEA MARKET	8000.00	8000.00	1800.00	9000.00
INTEREST	115.00	115.00	100.00	200.00
MISCELLANEOUS	6.00		174.00	200.00
TOTAL INCOME	9896.00	9515.00	3828.00	11500.00
BUDGET SUMMARY				
TOTAL INCOME	9896.00	9515.00	3828.00	11500.00
TOTAL EXPENSES	-8232.00	-9300.00	-7150.00	-12100.00
EXPECTED INC./DEC.	864.00	155.00	-322.00	-600.00
* CUT OFF DATE FOR INCOME 2-28-89				

MIKE AND KEY AMATEUR RADIO CLUB  
GENERAL LEDGER  
BALANCE SHEET  
3/01/89

ASSETS

CASH	4146.00
REPEATER	5019.00
<b>TOTAL ASSETS</b>	<b>9165.00</b>

LIABILITIES

BEGINNING FUND BALANCE	12346.00
OPERATING DEFICIT	-3181.00
<b>TOTAL LIABILITIES AND FUND BALANCE</b>	<b>9165.00</b>

\* REPEATERS (FOR GENERAL INFO ONLY)

2 METER	2649.00
220 MHZ	2370.00

REPEATER ASSETS 5019.00

Call: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

WAGON WHEEL RESERVATION  
 (1) Camping unit = vehicle and tent or trailer, or motorhome.  
 Eight people maximum per unit.

TENT \_\_\_\_\_ TRAILER \_\_\_\_\_ MOTORHOME \_\_\_\_\_ ADDITIONAL VEHICLE \_\_\_\_\_

BARRACKS RESERVATIONS - #101 (10) & #102 (15), Total 25 spaces.  
 (1) FEE: \$8.00 (covers noon Friday to noon Sunday)  
 (Make check payable to: Mike & Key ARC)

Spaces requested \_\_\_\_\_ X \$8.00. Total enclosed \$ \_\_\_\_\_.

Mike & Key Field Day - 1989  
 P.O. Box 2121  
 Kirkland, Wa. 98083-2121



## M&amp;K ROSTER 5 MAR 89

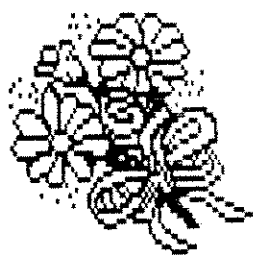
CALL	NAME	ADDRESS	CITY	STATE	ZIP	PHONE	DUES PAID TO	CLASS OF LICENSE
	JOSLIN, WAYNE L	1717 150TH SE #16	BELLEVUE	WA	98007	562-1171	89/11	T
*****	BROWN, ETHEL	1010 SW 134TH RM 58 ELDRADO WEST	SEATTLE	WA	98146		LIFE	
*N7AVD	de JONG, DEBORAH	20903 NE 77TH ST	REDMOND	WA	98053	868-0457	90/01	G
*N7AWW	DAVIS, ERNIE	40 MONROE PKW BOX 200 #229	LAKE OSWEGO	OR	97035	503-760-2130	89/12	
*N7HMW	EVANS, JOHN	38704 VEAZIE-CUMBERLAND DR SE	ENUMCLAW	WA	98022	825-1276	90/01	T
*N7JNC	HARSTON, CATHERN	1989 LORRAINE ST	ENUMCLAW	WA	98022	825-3032	89/12	T
*N7JWX	HARSTON, RAY	1989 LORRAINE ST	ENUMCLAW	WA	98022	825-3032	89/12	G
*W7BUN	SELIGMAN, JERRY	12306 00TH AVE E	PUYALLUP	WA	98373	845-7652	89/03	A
*WA7GHZ	CORNELL, RALPH	21211 4TH AVE SO	SEATTLE	WA	98148	878-8119	90/01	T
*WA7HWX	HEDBERG, JAN	17720 NORTH PARK PL.N.	SEATTLE	WA	98133	542-8975	89/04	T
*WA7DXN	McGAHUEY, BOB	14840 74TH PL NE	BOTHELL	WA	98011	488-7841	89/05	A
AI7V	DAVIS, RICHARD A	3544 STRATTFORDT	KENT	WA	98032		89/10	
K0WZA	LaFAVOR, DONALD J	P.O. BOX 94182	SEATTLE	WA	98124	248-2437	89/07	A
K6DOW	MODDISON, H WAYNE	16646 SE 134TH ST	RENTON	WA	98056	271-5314	90/02	A
K6PQJ	YERKES, ROBERT	P.O. BOX 853	NORTH BEND	WA	98045	888-3420	89/07	
K7JWJ	LEWIS, HARRY	10352 SANDPOINT WAY NE	SEATTLE	WA	98125	523-9117	90/02	E
K7KOT	TILLET, STEVE	1642 BROWNS PT BLVD	TACOMA	WA	98422	927-5456	89/01	A
K7MRH	NIXON, WARREN	26900 AVON COURT	KENT	WA	98032	854-9028	90/02	G
K7ND	CHRISTIANSEN, JIM M.	P.O. Box 147	FOX ISLAND	WA	98333	549-4062	89/07	E
K7PFR	BECKER, JOHN	8501 WILLOWS RD #293	REDMOND	WA	98052		90/01	G
K7PHZ	CARPENTER, JIM	2125 ELM SE	AUBURN	WA	98002	833-9017	90/03	
K7PZX	JACKSON, KEN	19223 SE GREEN VALLEY RD	AUBURN	WA	98002	833-8999	90/09	G
K7QDI	ELDER, JIMMIE S.	7579 S LAUREL ST.	SEATTLE	WA	98178		90/11	A
K7QMI	SCHNEEBECK, TIM	4522 BROOKLYN AVE NE #103	SEATTLE	WA	98105	547-0404	89/04	T
K7WTG	HEDBERG, PETE	20904 NE 77TH ST	REDMOND	WA	98053	868-1563	90/01	G
K7YR	RAU, KEN	5430 LAKE ALICE RD SE	FALL CITY	WA	98024	222-7711	90/01	E
K7YZZ	HUTTON, LOUIS I.	12235L SE 62ND ST	BELLEVUE	WA	98006		89/10	
KA6QMT	WERTS, DON	14906 SE 138TH PL	RENTON	WA	98056	228-1099	89/06	N
KA7AND	DRESSEL, E. W.	9202 DAYTON AVE N	SEATTLE	WA	98103		90/02	
KA7BQY	KINSINGER, BILL	19811 SE 370TH PL	AUBURN	WA	98002	833-7778	89/06	T
KA7CSE	HANSOW, MICHAEL	1412 LK YOUNGS WY SE	RENTON	WA	98058	255-7137	89/06	G
KA7MCH	CASTOR, CURTIS	7527 LAKE CITY WAY NE	SEATTLE	WA	98115	524-1901	89/11	N
KA7NHY	VYBORNY, FRANK	5767 S EDDY SE	SEATTLE	WA	98118	723-4475	89/12	
KA7OVQ	RICHARDS, MARK J.	2411 S 116TH WAY	SEATTLE	WA	98168	248-1581	89/08	
KA7QHG	KRIEGER, FRANK	3410 S 166th St.	SEATTLE	WA	98188	243-9232	89/06	
KA7RRA	ARCHER, DAVID	7807 218TH SW APT 51	EDMONDS	WA	98020	672-2425	89/04	G
KA7SEH	PHELAN, TOM	16460 51ST AVE SO	SEATTLE	WA	98188	243-5862	90/04	T
KA7VBA	FULLER, JOHN	405 S 164TH ST	SEATTLE	WA	98148	244-4131	90/02	T
KA7YDG	JENNISON, KIMBERLY	P. O. BOX 324	ORTING	WA	98360	893-2648	89/09	
KA7YPQ	REGAN, GLENN	2500 384TH ST #217	FEDERAL WAY	WA	98003	838-1653	89/03	N
KA7ZWN	RICHTER, DON	21648 105TH PL SE	KENT	WA	98031	852-0498	90/01	
KA7ZYN	BUTT, REG	700 216TH PL NE	REDMOND	WA	98053		89/12	
KA7ZZJ	SCHULZ, ARTHUR J	2054 NE 103RD ST	SEATTLE	WA	98125		90/02	
KB7AFS	AYENGAR, PRAHLAD K.N.	2516 NE 95TH ST	SEATTLE	WA	98115		93/10	
KB7AID	VAN TUYL, JOYCE	P.O. BOX 23	PACIFIC	WA	98047	939-8875	89/05	N
KB7BRH	WALTOSZ, JIM	12021 148TH AVE SE	RENTON	WA	98056	271-1327	89/08	
KB7BRT	EVANS, EDITH I.	1841 McHUGH AVE	ENUMCLAW	WA	98022	825-2560	89/08	
KB7BTN	NORTHCUTT, MARK	353 S 116TH	SEATTLE	WA	98168	243-6432	89/06	N
KB7BVL	PASQUIRE, ADRIAN	12919 NE 76TH	KIRKLAND	WA	98033	867-0209	89/04	T
KB7CLF	SWINEY, JEAN P	7206 S 116TH ST	SEATTLE	WA	98178	772-6301	89/09	N
KB7CPI	HART, DONALD	1520 HARRINGTON AVE NE	RENTON	WA	98056	255-9532	89/03	T
KB7ERE	CUSSON, MIKE	15918 81ST PL NE	BOTHELL	WA	98011	488-2518	89/05	N
KB7ERF	EVERETT, CHARLES R	31203 MILITARY RD.	AUBURN	WA	98001	839-0578	89/05	N
KB7FHJ	PAUZA, DARLENE F	19250 AURORA AVE N	SEATTLE	WA	98133	542-6448	89/07	N
KB7FLT	PERRIN, MARK	317 CHICAGO BLVD S	PACIFIC	WA	98047		90/02	

## M&amp;K ROSTER 5 MAR 89

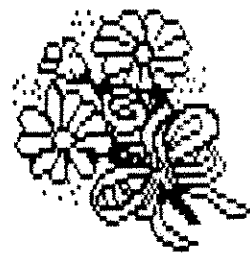
CALL	NAME	ADDRESS	CITY	STATE	ZIP	PHONE	DUES PAID TO	CLASS OF LICENSE
KB7FLY	PERRIN, WILLIAM L.	900 29TH SE #A16	AUBURN	WA	98002	735-2850	89/11	N
KB7GDG	SMITH, KEN	15402 SE 132ND ST	RENTON	WA	98056	226-4899	90/01	N
KB7GEW	LASKEY, CLAIRE	3616 SW ANDOVER	SEATTLE	WA	98126	935-5547	90/01	N
KB7LM	RULIFSON, BOB	14232 SE 23RD	BELLEVUE	WA	98007	746-5192	89/12	E
KB7ZS	BURRELL, JACK	108 130TH PL NE	BELLEVUE	WA	98005	454-2353	92/09	A
KD7NM	DONNELL, BOB	P.O. BOX 45645	SEATTLE	WA	98145	827-8005	91/02	A
KE7RK	DUNN, FLOYD L.	26151 195th PL SE	KENT	WA	98042		89/01	A
KE7WB	McCREA, BRIEN	13037 SE 159TH PL	RENTON	WA	98058	255-6492	89/09	A
KF7QF	WOOD, BRIAN	8706 206TH ST SE	SNOHOMISH	WA	98290	482-2361	90/01	A
KL7BB	BALZARINI, BILL	1518 S PEARL ST	SEATTLE	WA	98108	885-4738	90/02	E
KS7F	SMITH, WAYNE	11074 SE 181ST ST	RENTON	WA	98055	226-8576	89/09	
N0YC	BOESSENROTH, TED	1912 EDMONDS DR	RENTON	WA	98055	255-7721	89/11	E
N6CES	PERKINS, FRANK	924 217LTH ST SW	BOTHELL	WA	98021	882-3905	90/01	T
N7AMX	de JONG, KARL	20903 NE 77TH ST	REDMOND	WA	98053	868-0457	89/06	A
N7BNJ	PRICE, LAWRENCE J.	10412 36TH ST E	PUYALLUP	WA	98372	841-7465	89/08	
N7CKD	PETERSON, DENNIS	4248 A ST SE #609	AUBURN	WA	98002	833-7243	89/11	G
N7DIP	GILMORE, PAUL	1402 SW 152ND ST	SEATTLE	WA	98166	244-3001	90/03	E
N7ELW	BOONE, JOHN M. SR	1917 GIBSON RD	EVERETT	WA	98204	771-4369	89/06	T
N7GVX	BOSWELL, FLOYD	12137 SE 276TH CT	KENT	WA	98031	631-9394	89/06	
N7HKL	VAN TUYL, TED C.	P.O. BOX 23	PACIFIC	WA	98047	939-8875	89/09	T
N7HWI	JOHNSTON, DAVID W	3928 21ST AVE SE #A	LACEY	WA	98503		90/02	
N7IHS	GRIMMETT, JACK	1525 PINE VIEW DR NW	ISSAQUAH	WA	98027	392-9510	89/11	T
N7IL	LEE, IVAN	15631 12TH AVE S	SEATTLE	WA	98148	242-6501	90/03	A
N7IVM	BENNETT, (BEN) W.E.	625 109th AVE SE	BELLEVUE	WA	98004	451-9096	90/01	T
N7IVR	WINKLER, DAN	2214 E HIGHLAND DR	SEATTLE	WA	98112	324-6689	89/11	E
N7JMP	SCHUMACHER, RALPH E.	4032 E MERCER WAY	MERCER ISLAND	WA	98040	232-8053	89/10	E
N7JNF	HARSTON, GLEN B.	26060 SE 411 ST	ENUMCLAW	WA	98022	825-1870	89/04	T
N7JPN	JOHNSTON, BETH	3928 21ST AVE SE #A	LACEY	WA	98503	456-6676	89/04	T
N7JFW	STROEHER, JOYCE	19415 SE 21ST	ISSAQUAH	WA	98027	392-5303	90/01	T
N7JWH	JOHNSON, CHARLES	2314 SAHALEE DRIVE E	REDMOND	WA	98053	868-4546	89/02	A
N7JWV	CROWELL, GARY	2815 53RD ST SE	AUBURN	WA	98002	863-0636	89/09	
N7KHU	GILCHRIST, TOM	1411 GRANT AVE S #6204	RENTON	WA	98005	226-3708	90/03	T
N7KWZ	AHERNS, NORMAN R.	5405 S 305TH ST	AUBURN	WA	98001	838-0521	89/12	
N7LIR	SWINEY, EARL	7206 S 116TH ST	SEATTLE	WA	98178	772-6301	90/04	G
N7LMT	RICHARDSON, CHUCK	9600 34TH AVE SW	SEATTLE	WA	98126		90/02	
N7LYD	DAVIS, RANDY	1224 SW 124TH ST #204	SEATTLE	WA	98146	241-1825	90/01	T
N7NW	GOODELL, HAL R.	P.O. Box 147	FOX ISLAND	WA	98333	549-4178	90/01	E
N7PK	MOWRY, RICHARD D	8415 24TH AVE SW	SEATTLE	WA	98106	767-5269	89/07	E
NF7X	LOGAN, JERRY L	226 77th PLACE SW	EVERETT	WA	98203		89/11	E
NU7Z	BEATTY, RICK N.	23115 84th West	EDMONDS	WA	98020	775-9196	89/12	A
NX7N	ANDERSON, ROBERT J.	12029 SE 220 PL	KENT	WA	98031	631-8330	89/11	E
W2JTP	KRETZMAN, BYRON	5220 217TH ST SE	WOODINVILLE	WA	98072	487-0287	89/12	
W7BQG	HAMER, ELLIS K.	1402 22 NE #310	AUBURN	WA	98002	939-4895	89/09	A
W7EVS	WALE, MONTY	27603 W VALLEY HWY	KENT	WA	98032	854-2531	90/03	
W7GEY	WEILAND, WARD	12230 MARINE VIEW DR SW	SEATTLE	WA	98146	244-1733	90/01	E
W7JIE	GIBSON, M.L.	1215 N 28TH PL	RENTON	WA	98056	226-4222	91/04	E
W7JWF	LARSON, ARNOLD	15348 70TH AVE NE	BOTHELL	WA	98011	488-7463	89/05	A
W7KCX	DIETSCH, DICK	23713 NE 72ND ST	REDMOND	WA	98053	868-8386	90/01	A
W7MDU	WESTBO, LEN	10528 SE 323RD ST	AUBURN	WA	98002	833-4834	89/11	E
W7MXY	BRELL, ROY M.	10414 147TH AVE SE	RENTON	WA	98056	235-1986	89/12	
W7PRW	BUTLER, CARL	16831 40TH AVE S	SEATTLE	WA	98108	242-6297	90/01	G
W7QCV	KING, HAF	451 145TH PL NE	BELLEVUE	WA	98007	747-0441	89/07	
W7QGP	LEWIS, MARY	10352 SANDPOINT WAY NE	SEATTLE	WA	98125	523-9117	90/02	A
W7SRZ	NORTHCUTT, CHUCK	353 S 116TH	SEATTLE	WA	98168	243-6432	89/03	
W7TRA	JOHNSON, DON	3519 27TH AVE SE	PUYALLUP	WA	98374	841-3326	90/01	G

## M&amp;K ROSTER 5 MAR 89







CALL	NAME	ADDRESS	CITY	STATE	ZIP	PHONE	DUES PAID TO	CLASS OF LICENSE
W7TWU	KELLER, DICK	933 SW AUSTIN	SEATTLE	WA	98106	762-4459	89/03	G
W7VIH	SHINNERS, PAT	534 N 78TH	SEATTLE	WA	98103	782-6978	90/04	G
W7ZLW	NELSON, VERN	16812 NE 107TH	REDMOND	WA	98052	882-3567	89/03	A
W9BFP	MEREDITH, RICHARD	10530 SE 206TH PL	KENT	WA	98031	852-1213	89/02	A
WA10NP	MCCALLUM, DAVID S	16203 144TH SE	RENTON	WA	98058	255-7167	90/01	A
WA1SEY	ALLYN, M.A.	6826 16TH AVE NE	SEATTLE	WA	98115		90/10	
WA7AVC	CADY, GORDON	8216 38TH AVE NE	SEATTLE	WA	98115	527-1387	89/11	G
WA7BUY	SAMPONT, GERALD M.	8806 116TH AVE NE	KIRKLAND	WA	98033	827-4480	89/05	T
WA7C	WILBRECHT, DON	5211 26TH AVE SE	LACEY	WA	98503		89/05	E
WA7EBH	STROEHER, CHARLES A.	19415 SE 21ST	ISSAQUAH	WA	98027	392-5303	90/01	A
WA7EJY	BRUSH, ARCHIE	22516 30TH AVE SO	DES MOINES	WA	98198	878-2833	90/01	T
WA7EKH	LESLIE, RAY E.	13517 117TH AVE NE	KIRKLAND	WA	98034	821-4188	91/01	G
WA7ELI	RAMBO, LEW	11605 NE 150TH PL	BOTHELL	WA	98011	488-9120	89/07	T
WA7F	EVANS, RONALD D.	1841 MCHUGH AVE	ENUMCLAW	WA	98022	825-2560	89/06	
WA7FMT	MORRIS, JIM	4406 S 166TH ST	SEATTLE	WA	98188	246-4270	89/07	
WA7FUS	DAHL, PETER	1609 S 261ST PL	KENT	WA	98032	839-7717	89/05	A
WA7HQB	REHNSTROM, JOHN	9621 9TH NW	SEATTLE	WA	98117	783-2489	89/06	T
WA7KBK	REMBAUGH, DON	20175 45TH NE	SEATTLE	WA	98155	362-9189	90/01	G
WA7NIW	RADFORD, DICK	11387 NE 91ST	KIRKLAND	WA	98033	883-9803	89/01	T
WA7RJT	GRAZIER, CHUCK	13210 231ST SE	ISSAQUAH	WA	98027	392-3764	90/01	A
WA7RJW	HOLT, CHRIS	RT 1 BOX 105-A	MANSON	WA	98831	509-887-9429	90/01	T
WA7TAI	JACOBSON, GENE G.	7334 126TH AVE NE	KIRKLAND	WA	98033	822-3931	90/01	A
WA7UEW	LUNDSTROM, DICK	34022 43RD S	AUBURN	WA	98001	838-9559	90/01	T
WA7UJR	HEWSON, CHARLES	10904 SE 236 PL #J-206	KENT	WA	98031	859-1860	89/11	A
WA7UVJ	DINKELMAN, MICHAEL	637 2ND AVE S	KENT	WA	98032	854-4031	89/05	E
WA7VEB	LOSEY, BOB	3425 S 176TH #132	SEATTLE	WA	98188	431-8540	90/01	G
WA7VEH	BINGHAM, WILLIAM	11605 SE 45TH PL	BELLEVUE	WA	98006	746-6024	90/01	
WA7WKT	SKOGG, ARNE W	30617 2ND AVE SW	FEDERAL WAY	WA	98003	839-2501	92/01	T
WA7YFH	KUHLMEIER, THOMAS D.	3828 34TH AVE SW	SEATTLE	WA	98126	932-8846	89/05	G
WB05NK	EVANS, RANDAL S.	22209 122 AVE SE	KENT	WA	98031	630-4200	89/09	
WB7AYU	CROSS, MICHAEL W.	5803 SW HANFORD	SEATTLE	WA	98116	935-2688	91/08	T
WB7DVX	HOLT, LINDA	RT 1 BOX 105-A	MANSON	WA	98831	509-687-9429	90/01	T
WB7TBR	ZUMBRUNNEN, VICTOR	22032 8TH AVE S	DES MOINES	WA	98198	824-2098	90/02	G
WB7TOI	BASTA, JOSEPH	3734 147TH SE	BELLEVUE	WA	98006	641-3729	90/01	A
WB7VJA	SUTTON, PATI D.	3516 SW 343RD	FEDERAL WAY	WA	98023	927-7088	89/12	G
WB7WGB	DILL, CHARLES B.	5924 138TH PL SE	EVERETT	WA	98200	337-9416	89/07	
WB7WNF	ELKINS, RALEIGH C.	13506 CEDAR CT EAST	SUMNER	WA	98390	897-0090	90/12	T
WB9JZL	GARDNER, DONALD	PO BOX 69637	SEATTLE	WA	98188	241-5973	89/05	A
WI7T	CROWLEY, LARRY	13707 SE 18TH ST	BELLEVUE	WA	98005	746-2513	89/02	A
WM7A	SUTTON, JIMMY B.	3516 SW 343RD	FEDERAL WAY	WA	98023	927-7088	89/07	E
WM7N	WESTON, MATTHEW	10522 NE 32ND PL #126	BELLEVUE	WA	98004	822-1333	90/02	E
WN7NYC	JACOBS, LES	14300 103RD NE	BOTHELL	WA	98011	821-8839	90/01	A
WQ7H	WRAALSTAD, JAMES	7617 140TH ST CT E	PUYALLUP	WA	98373	531-6489	89/12	
WS7K	WHITING, HERSCHEL L	9820 NE 16TH	BELLEVUE	WA	98004	454-6640	89/06	A
WV7Q	PASQUIER, CAROLYN	PO BOX 237	KIRKLAND	WA	98003	827-4977	89/04	T
WV7R	KUSH, ALLAN L	10506 NE 133RD PL	KIRKLAND	WA	98034	823-4393	89/09	T



# APRIL 1989 MIKE & KEY ARC



S M T W T F S

30						1  AWARDS BANQUET - MAKE PLANS TO ATTEND
2	3	4  BOARD MEETING AT QTH OF: NUTZ RELAY <sup>Dead</sup> <sub>line</sub>	5  M&K NET NITE CHECK IN YOUR STATION AND HEAR WHAT'S HAPPENING KBTBRH	6	7	8
9	10	11	12  M&K NET NITE CHECK IN YOUR STATION AND HEAR WHAT'S HAPPENING WVJR	13	14 BRING NEWSPAPERS - THE PRICE IS DOWN WE NEED LOTS (BUNCHES)	15 ATTEND YOUR CLUB MEETING COFFEE AT 0930 BRING A FRIEND
16	17	18	19  M&K NET NITE CHECK IN YOUR STATION AND HEAR WHAT'S HAPPENING WATVH	20 PASSOVER	21	22
23	24	25	26  M&K NET NITE CHECK IN YOUR STATION AND HEAR WHAT'S HAPPENING N7BNJ	27	28	29

THINK FIELD DAY