

SEATTLE, WASHINGTON

# K7LED RELAY

VOLUME 10

OCTOBER 1981

NUMBER 6

## CLUB ACTIVITIES

- October 17 Business Meeting at 10:00 am  
Bunny Hunt after meeting. Come ready to hunt!
- November 7 Mike & Key Club Auction. Doors open at 7:00am
- December 5 Mike & Key Christmas Party. Fun starts at 6:30pm

### MIKE AND KEY AMATEUR RADIO CLUB

4522 Brooklyn Ave. N.E., Apt. 316  
Seattle, WA 98105

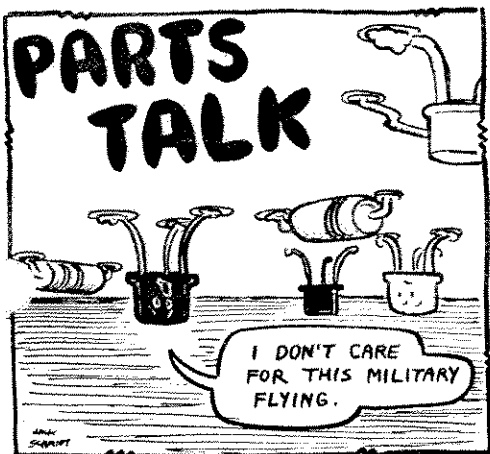
ADDRESS CORRECTION REQUESTED

IT'S DUES TIME



FIRST CLASS

KARL & DEBORAH  
de JONG



E D I T O R S   N O T E S

First off, I wish to thank everybody in the club for bearing with me during the past two months, and apologize for the lack of the club newspaper. My labors the last several months has been very demanding of my time and energy. Hopefully as things wind down from the summer I will have no further difficulties getting the paper out to you. The Board has provided me with a further boost by "encouraging" all of the members of the Board to submit at least 1/2 page for inclusion in the Relay each month. This is not to discourage you from sending me articles and input on your own, but now that the paper has a staff just looking for news, you have no excuse for not having your voice heard (printed?). If you have something to say, but just can't find the way to say it, my "reporters" will probably be willing to help, so that they don't have to "invent" news, a very difficult task indeed!!

73 till next month

*Bob*

Contact Burr or Edna Rideout to help out for the Christmas Party, comming up on December 5th. If you have a preference as to what you wish to bring to the potluck be sure to get your name on the list early!

If you are going to help out with the set-up for the Auction, breakfast is at the Omni Restaurant, 4701 S. 188th, at about 4:30 to 5:00 AM (!) before the auction. Don't come to try to get an early sellers spot - We WON'T let you! Club members are at an atvantage anyway (you get a copy of registration form in advance)

It's time once again time to begin thinking about the Santa Talks. Any input and/or assistance will be welcomed by Tim, K7QMI. If you desire information or wish to help, please call Tim at 634-0628 you desire

**AN ARRL-AFFILIATED CLUB**

**OFFICERS**

**INFORMATION**

President	Hal Goodell	N7NW	927-7603	The Mike & Key net meets each Sunday at 10 AM on 3930 KHz. Novices at 3730 KHz. VHF on 146.58 MHz and K7LED/R on 52.37-53.37. Club meetings the 3rd Saturday at 10 AM at the Good Neighbor Center at 305 S. 43rd St., across from the Valley General Hosp. in Renton.
Vice President	Harry Lewis	W7JWJ	523-9117	
Secretary	Debbie de Jong	N7AVD	883-3012	
Treasurer	Mike Cross	WB7AYU	935-2688	
Activity Mgr	Karl de Jong	N7AMX	883-3012	
Trustee #1	Jim Strang	W7GPW	392-5554	
Trustee #2	Gene Jacobsen	WA7TAI	822-3931	
Trustee #3	Jim Carpenter	K7PHZ	833-9017	
Trustee #4	Dennis Eckert	KB7ST	542-1365	
Trustee #5	Bob Rulifson	KB7LM	746-5192	
Radio Officer	Ken Rau	K7YR	392-7954	
Editor	Bob Donnell	WA7TRI	634-2820	
	4522 Brooklyn Ave. NE #316 Seattle WA 98105			

The K7LED RELAY is the offical publication of the Mike and Key Amateur Radio Club, 23206 SE 53rd, Issaquah, WA 98027. Articles may be quoted in full or in part without prior permission, providing the K7LED RELAY is credited. Deadline is the first of each month.

## New Satellite

Have you heard the new satellite yet?

UoSAT, constructed by the University of Surrey in England, was launched October 6. You can't transmit through this satellite like you could with the others, but that is because UoSAT was designed for a different purpose.

"In recent years, Amateur Radio probably has developed stronger communication skills at the expense of experimental skills, largely due to the impact of relatively cheap, mass-produced, high-technology equipment and has in turn tended to discourage the broader audience of amateur scientists, technicians and dabblers who could so enrich the fraternity," noted Martin Sweeting, G3YJO, one of the sparkplugs of the UoSAT project.

Thus, the objectives of this satellite has been to provide hams with a means of studying propagation on HF through microwave frequencies, to stimulate a greater degree of interest in space sciences among the educational institutions and to study and evaluate the suitability of novel methods and new frequencies for use in subsequent amateur spacecraft.

Propagation studies are being done through beacon transmissions on 7.058, 14.001, 21.001 and 28.001 MHz.

A General Data Beacon is transmitting on 145.825, using narrow-band FM at 450 mW. Data is transmitted in AFSK to minimize the Doppler effect. A small, fixed, crossed-dipole receiving antenna should do the job for this beacon. This beacon is transmitting the following information:

- \* 1200-baud ASCII telemetry
- \* 300-baud ASCII telemetry
- \* 110-baud ASCII telemetry
- \* 45.5-baud BAUDOT telemetry
- \* 12 WPM Morse code telemetry
- \* synthesized speech telemetry
- \* spacecraft computer asynchronous interface
- \* Earth pictures in a 256-by-256 pixel mode

An Engineering Data Beacon is operating at 435.025 with 400 mW of power, providing the primary spacecraft engineering data and high-speed data channel intended for advanced work. Modulation is bi-phase FSK. Not only with the Engineering Beacon provided more detailed information in the same format as the General Beacon, but the UHF transmitter will add direct magnetometer readings for indications of the magnetic flux of the field around the Earth and direct radiation counter information.

For those of you who need information on the orbit, the following information was copied off the air October 6, hours after the 'craft was launched from Vandenberg AFB in California.

Period = 95.464 minutes                      Altitude = 343.75 miles/550 Km  
Inclination = 97.4687 deg                      Westward movement = 23.866 deg/orbit  
Reference orbit #9 at 0109Z, October 7, 1981 at 150.5 deg West Long.

-- Dennis, KB7ST

## President's Report

Fall has arrived in Seattle. The time of the year when we can get started on those indoor ham projects that we have been putting off in favor of outdoor summertime activities. The last hamfest of the year has come and gone. How many did you make this year?

Club activities have been at a lull since Field Day (where we captured third place in Class 7A) and attendance at meetings has been somewhat less than outstanding. But with the arrival of fall brings the Auction on November 7 and the Christmas Party on December 5. Mark your calendar. The bunny hunt has been resurrected and the next one will be after the October 17 club meeting. Karl, N7AMX, has promised a quite elusive bunny. So bring your mobile, XYL, or hunting partner and get in on the fun. Perhaps we can get together for lunch afterwards.

Incidentally, with fall comes outstanding HF band conditions. Many DX-peditions have been planned to various rare locations. Also with fall comes the contest season. DX contests in October and November, Sweepstakes in November and the 10-meter contest in December. What a better time to get on the air and practice those Field Day techniques. One doesn't have to go all out or even enter the contest to have fun and sharpen your skills.

Our auction each year provides us with club operating funds to carry us through the year. Membership support is needed to put on a good smooth-running show. We need help setting up, moving equipment, registration, selling food and all those little, but necessary other duties. Please contact Karl if you can help us. Also, this is a good opportunity to turn those unneeded goodies into cash. See you at the auction.

Hal

## VHF NEWS

\*\*\*F2 on six? This is a big question mark. Rumor has it that the sunspot count is high, and will probably support F2 on this band this fall and spring. October and November are the months to be watched.

\*\*\*220 SSB Activity in the Northwest is growing with about seven stations in Washington, three in British Columbia and two in Oregon. Jim, K7ND, has made four contacts, KA0Y & WB0TEM in Iowa, K5FF in New Mexico and W6PO in California. WA0LPK in Alaska will soon put an EME station on the air. Equipment is being donated by fellow VHFers in the Lower 48.

\*\*\*144 SSB Much activity on 144.2 nightly. FMers are asked to refrain from using 144 to 144.5. Several FM stations have been found transmitting in the CW-only part of the band of 144 to 144.1. Please spread the word that this is illegal. Rhode Island is to be active via EME the 17th and 18th of October. WB7DTI and N7NW are gunning for this rare state on two.

--contributed by Hal, N7NW

ACTIVITY MANAGER SPEAKS:

Rub a dub dub, the Pres. (N7NW) has got a new tub, 25 feet--give or take a foot. Wonder which goes up first--the sail or the antenna?

Join us for another Bunny Hunt after the next club meeting, Oct. 17--the same boundaries as before.

If anyone would like to work the Sweepstakes contest on November 28-29 I would like to put together a group station. Contact N7AMX.

This month's club raffle has a lot of neat stuff, such as a marine radio, hand-held mikes, an antenna mount, project boxes and lots of other things.

FLASH.....HOT SCOOP!!!!!!!!!!!!!! K7LED placed third in class 7A for Field Day 1981.



BIRTHDAY.....BIRTHDAY.....BIRTHDAY.....BIRTHDAY.....BIRTHDAY.....

JULY: Debi Holt, Gene Jacobson, Archie Brush, Ralph Funkhouser, & Burr Rideout.

AUGUST: Al Jensen, Hal Goodell, Pat Shinnors, Ken Jackson, Chuck Stroehler, Dave Grant, Joe Rutledge, Mike Cross, Dennis Eckert.

SEPTEMBER: Sue Needham, Dick Mowry, Jim Christianson, Gib Gibson, Jim Hoggard, Tony Alix, & Edna Rideout.

OCTOBER: Dennis Shirrel, Joe Fannin, Deborah de Jong, Al Takacs, Ralph Cornell, & Trisha Thompson

Hope every one above had a happy day on their birthday!!

BOARD MEETING NOTES..... ..

We have two chairpersons for the Christmas Party this year, they are Edna and Burr Rideout--should make the party doubly good. Do them a favor and volunteer for the little bit of work required to put the party on. We have been discussing a presentation on Amateur Radio for several months. It appears that if we do it, it will have to be a M&K event since the other clubs are not too interested, it was also decided to table the matter until January since the next few months are busy ones. There was a long conversation about the RELAY that ended up with the Board members being required to submit at least  $\frac{1}{2}$  page per month to Bob, WA7TRI, who will edit and get the paper out now that his schedule is slowing down. We also talked about the attendance and lack of programs lately and received some very good suggestions. With the Auction coming up we had a combined Auction meeting at the same time, since most of those involved are old hands at it it went quickly, but Harry, W7JWJ, brought up some suggestions for making it more interesting. It is too late to implement any with the exception of a raffle to help keep the people there all day. We expect to meet for breakfast at the Omni Restaurant at 4:30-5:00AM and be at the hall by 6:00AM to get set up. NO SELLERS ALLOWED IN UNTIL 7:00AM! DON'T EVEN TRY!!

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

Who got the blame for forgetting the tap to the keg at the Picnic?

Ken, K7YR, had better be a good boy so he can get another day off, hear he's been working hard.

There must be something about having red hair--at the Picnic the winners of the dollar coins both had red hair, as a matter of fact they both had Chuck Foltz for a father.

Dennis, KB7ST, let his wife, Kathy, put up the tent and true to her geology she used a rock to put in the stakes.

Tim, K7QMI, has a new dog, Lady, understand she likes to play tug o'war--with your fingers around her teeth!

Understand Walla Walla was fun--drippy too--but what I can't imagine is five men in one tent trailer, the snoring should have required an EPA statement.

Gib, sorry to hear they kicked you out of the sexual revolution for losing your ammunition.

Ask Tom, WA7TBP, about the bag of happiness he was to give to his chief.

Why does K7ND bounce 220 off the moon? Ask him.

Now that the Pres. has a sailboat when will he race the Treasurer in his?

I was going to get a 38 foot sailboat, but I couldn't afford 19 pairs of shoes.

AFTER A COUPLE OF CONFUSING MONTHS THE CLUB VOTED TO RETURN THE MEETING TIME BACK TO 10:00AM- TRY TO REMEMBER THAT ONE-I WILL.

DON'T FORGET\*\*WE ARE STILL ACCEPTING NEWSPAPERS AT THE MEETINGS--PLEASE CONTRIBUTE!!

BET YOU DIDN'T KNOW THAT DUMPTRUCKS HATE PORCUPINES--K7PFR DIDN'T EITHER.

HOPE LYNN, W7DSB, IS GETTING BETTER AFTER HIS OPERATION, WE MISS HIM.

WE HEAR THAT K7WTG IS CARRYING KITTY LITTER IN HIS SUITCASES, NOW.

DON'T ASK K7YR HOW TO GET YOUR TRAILER TO THE FRONT YARD--HE WILL GET YOU TWO RUTS, TOO.

WHEN WILL THE M&K HAVE A SPECIAL MOTORCYCLE CLUB\*\*THERE ARE ENOUGH NEW ONES AROUND.

# AMATEUR RADIO AUCTION

MIKE & KEY AMATEUR RADIO CLUB ANNUAL ELECTRONIC/HAM-GEAR AUCTION

**Saturday, November 7, 1981**

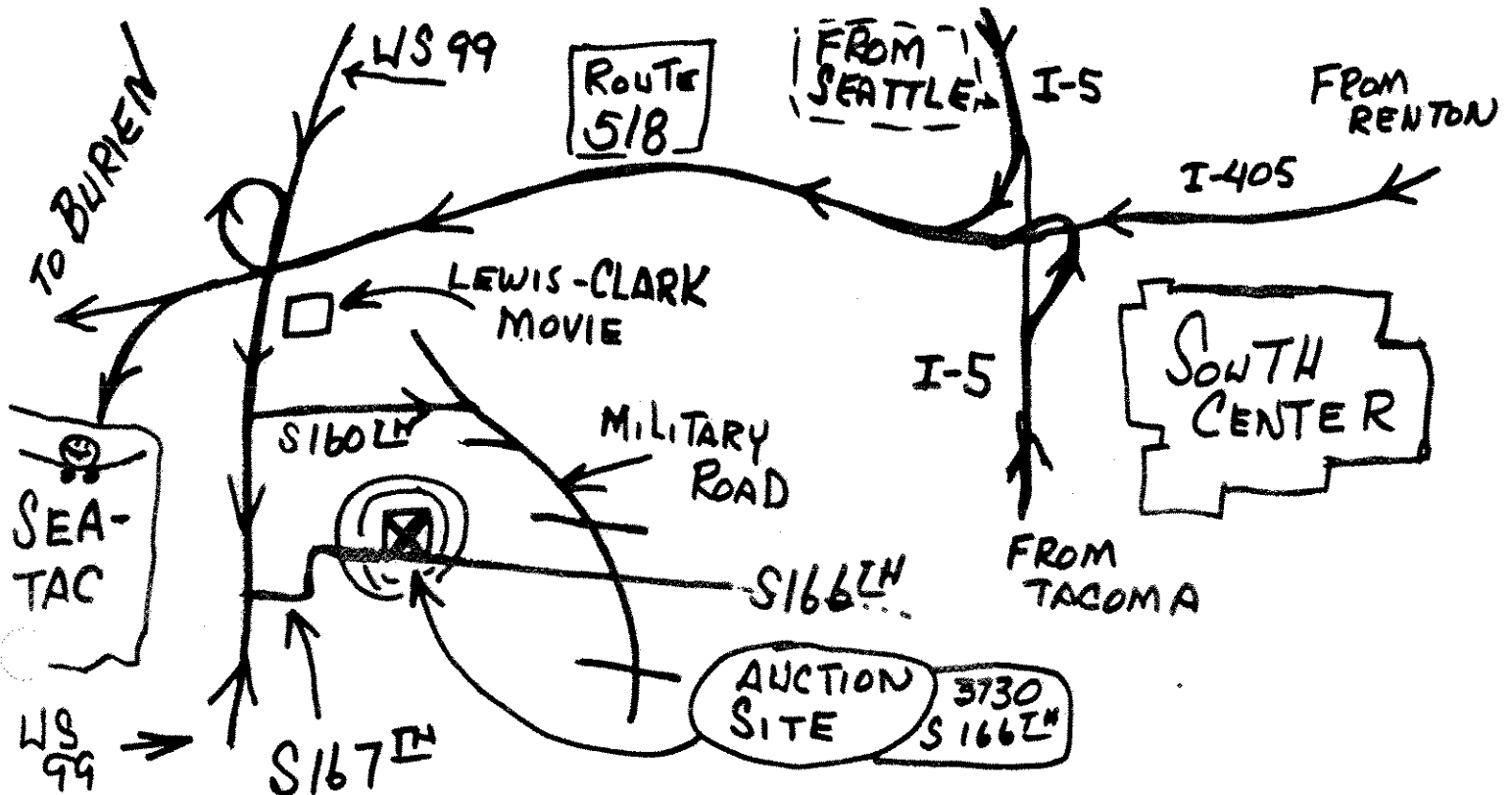
SAME LOCATION AS USUAL: McMICKEN HEIGHTS IMPROVEMENT CLUB 3730 S. 166th St.  
JUST EAST OF SEA-TAC AIRPORT. SEE MAP.

DOORS OPEN AT 7 AM FOR SELLER REGISTRATION, DUSTING OFF AND SET-UP. ATTACH A DESCRIPTION OF YOUR GEAR IN ORDER THAT OUR AUCTIONEERS CAN DO A BETTER JOB. A LIMIT OF TEN (10) ITEMS PER SELLER. JUNK BOXES COUNT AND GO CHEAP. CLUB TAKES 10% OF EACH SALE. MINIMUM BIDS ACCEPTABLE.

BIDDING STARTS AT 9:30 AM AND AUCTION GOES TILL EVERYTHING SOLD.

COFFEE, POP, AND EATS AVAILABLE FOR YOUR COMFORT.

TALK-IN FREQUENCY: 146.52, 146.58 AND 52.37/53.37 6M K7LED/R



MIKE & KEY ARC ANNUAL AUCTION

SELLER RULES & REGISTRATION.

1. A MAXIMUM of TEN LOTS per each seller. A LOT equals a box of stuff, a single unit, or a combination of things to be sold collectively for one price. You determine what goes into each lot.
2. If you want a MINIMUM BID on a lot you may establish this minimum. Be reasonable with your minimum. Experience shows high minimum bids are seldom successful. Minimum bids may be lowered at the sellers request only once.
3. The club will retain 10% of selling price.
4. Please offer only electronic, communications, or amateur gear for sale.
5. Seller must label each lot with his "seller number" and "item number". It will help if you provide a brief description of the items. Items must be listed below.
6. Check with the Club Treasurer to pick up your check before leaving or leave instructions for mailing.
7. Fill in Registration form and return to registration desk to pick up bidding card.

NAME (PLEASE PRINT) \_\_\_\_\_

CALL \_\_\_\_\_

ADDRESS \_\_\_\_\_

TOWN \_\_\_\_\_

ZIP \_\_\_\_\_

PHONE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

SELLER NUMBER \_\_\_\_\_

ITEM	DESCRIPTION	MINIMUM BID	SOLD FOR \$	BUYER NUMBER
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				



\* SEMICONDUCTOR DEFINITIONS AND TERMINOLOGY \*

Holes. . . . .	The presence of nothing
Hole Density . . . . .	A concentrated amount of nothing in one small place
Electron . . . . .	The absence of holes
Planck's Constant. . . . .	Two board feet
Junction . . . . .	Fork in the road
p-n Junction . . . . .	Roadside rest area
Semi-Conductor . . . . .	Truck driver
Degenerate Semiconductor . . . . .	Truck driver who likes his tea
Dope . . . . .	Someone you know .
Heavily doped. . . . .	Someone you wish you didn't know
Stored charge. . . . .	Wine cellar
Silicon. . . . .	A gay prisoner
Germanium. . . . .	Would have been a flower but someone misspelled it
Transport factor . . . . .	Cousin of Max Factor
Majority Carrier . . . . .	Republican with signs at a Republican Convention
Minority Carrier . . . . .	Democrat carrying signs at a Republican Convention
Base . . . . .	Low man in a quartet
Common Base. . . . .	Local pub
Collector. . . . .	One who collects
Common collector . . . . .	One who collects from everybody
Collector Capacity . . . . .	Maximum amount of people a common collector can handle
Collector Breakdown. . . . .	Result of being common collector
Voltage Drop . . . . .	A candy, like a gum drop
Current density. . . . .	Present stupidity
Current Gain . . . . .	Most recent rise in one's stock
Power gain . . . . .	Fullback up the middle
Atom . . . . .	Part of an American colloquial expression "up and atom"
Delay Time . . . . .	The time it takes to start working after one has arrived on the premises.
Rise Time. . . . .	The time one takes to get up in the morning after the alarm has gone off.
Fall Time. . . . .	September to November
Switching Transistors. . . . .	The act of changing one transistor for another
DCTL . . . . .	Don't complain if the transistor's lousy
IcZero . . . . .	Mistake, should read "I see Zorro
Miniture . . . . .	Small
Micro. . . . .	Damn small

CALLSIGN	CLASS	NAME	ADDRESS	PHONE
	Z	DIANA BECKER	21112 NE 60TH PL	REDMOND WA 98052 885-1944
	Z	DEBI HOLT	18495 BALLENGER WAY NE	SEATTLE WA 365-6
	Z	ETHEL BROWN	2200 SOUTHWEST BARTON	SEATTLE WA 98126
WB7AHD	A	JIM AESCHLIMAN	28901 229TH PL SE	KENT WA 98031 886-1661
N7AMX	G	KARL DE JONG	20903 NE 77TH ST	REDMOND WA 98052 883-3012
KA7APJ	G	JIM SMITH	5717 NE 56TH	SEATTLE WA 98105 523-6167
WA7AVC	G	GORDON CADY	8216 38TH NE	SEATTLE WA 98115 527-1387
N7AVO	G	DEBORAH DE JONG	20903 NE 77TH ST	REDMOND WA 98052 883-3012
N7AWW	T	ERNIE DAVIS	3945 SE PINE ST	PORTLAND OR 97214 232-5440
WB7AYU	T	MIKE CROSS	5803 SW HANFORD	SEATTLE WA 98116 935-2688
N7BT	E	GEORGE BOROSS	4058 SOUTH 262ND ST	KENT WA 98031 852-9412
W7BUN	A	JERRY SELIGMAN	12306 80TH AVE EAST	PUYALLUP WA 98371 845-7652
N7COO	G	DANIEL BUCHER	11113 BEACON AVE SOUTH	SEATTLE WA 98188
K7CK	E	CLAY FREINWALD	8515 IDLEWOOD DRIVE SW	TACOMA WA 98498 584-2988
KA7CYY	T	LYNN ALIX	24433 14TH AVE. SOUTH	KENT WA 98031 824-4176
W7DSB	E	TONY SCHUCK	4230 B3RD AVE SE	MERCER ISLAND WA 98040 232-8789
WB7DVX	T	LINDA MESSER		LEAVENWORTH WA
KA7DZJ	T	ROB VANCE	708 PARK AVE	LEWISTON ID 83501
WA7EBH	A	CHUCK STROEHER	13619 NE 11TH W-8	BELLEVUE WA 98005 747-7833
WA7EJY	T	ARCHIE BRUSH	22516 30TH AVE SOUTH	SEATTLE WA 98188 878-2833
WA7EKH	T	RAY LESLIE	19517 117TH AVE NE	KIRKLAND WA 98033 821-4188
WB7ELG	T	VICKIE MOWREY	P.O. BOX C	WINLOCK WA 98596
WA7ELI	T	LEW RAMBO	11605 NE 150TH PLACE	BOTHELL WA 98011 488-9120
WB7EMS	G	HAL PARRIS	3405 SOUTH 176TH #128	SEATTLE WA 98188 244-0641
AD7G	E	STEVE ROLEY	7014 SOUTH 126TH	SEATTLE WA 98178 772-2399
WA7GHZ	T	RALPH CORNELL	21211 4TH AVE SOUTH	SEATTLE WA 98148 878-8119
W7GPW	A	JIM STRANG	23252 SE 54TH PLACE	ISSAQUAH WA 98027 392-5554
K7GSE	G	FRANK REMINGTON	33702 51ST AVE SOUTH	AUBURN WA 98002 883-4754
KA7HNG	C	BURR RIDEOUT	18616 92ND NE	BOTHELL WA 98011 486-6610
KA7HMH	T	EDNA RIDEOUT	18616 92ND NE	BOTHELL WA 98011 486-6610
WA7HGG	T	JOHN REHNSTROM	9621 9TH NW	SEATTLE WA 98117 783-2489
WA7HUL	A	BILL IVERSON	11840 SE 288TH	KENT WA 98031 631-1223
WA7HWX	T	JAN HEDBERG	20904 NE 77TH ST	REDMOND WA 98052 883-8535
KE7I	E	JOHN BENTLER	17018 124TH AVE SE	RENTON WA 98055 271-6125
WA7IVO	A	NICK WINTER	6917 47TH COURT WEST	TACOMA WA 98466 564-1444
W7JIE	E	M. L. GIBSON	1215 N 28TH PLACE	RENTON WA 98055 226-4222
W7JWJ	E	HARRY LEWIS	10352 SANDPOINT WAY NE	SEATTLE WA 98125 523-9117
WA7KBK	G	DON REMBAUGH	20175 45TH NE	SEATTLE WA 98155 362-9189
W7KXC	A	RICHARD DIETSCH	16807 NE 89TH	REDMOND WA 98052 885-6559
K7KOT	A	STEVE TILLET	1642 BROWNS POINT	TACOMA WA 98422 927-5456
KB7LM	E	BOB RULIFSON	14232 SE 23RD	BELLEVUE WA 746-5100
WA7LNG	A	JIM SUTTON	3516 343RD	FEDERAL WAY WA 98003 927-0
K7MF	E	RICK SCHAAK	ROUTE 1, BOX 114	VAUGHN WA 98394 884-2
K7MHM	T	LEN MILLER	4040 AUBURN WAY SOUTH #77	AUBURN WA 98002
WA7MSD	G	PAT CARLSON	4114 NE 26ND PLACE	RENTON WA 98055
K7MYY	G	JIM HOGGARD	P. O. BOX 2642	LYNNWOOD WA 98036 778-5626
K7MWC	E	WILLIAM BALZARINI	1518 SOUTH PEARL	SEATTLE WA 98108 762-7738
K7MXE	G	BOB HESELBERG	RT 2, BOX 2114	EATONVILLE WA 98328
K7ND	E	JIM CHRISTIANSEN	22105 7TH PLACE WEST	BOTHELL WA 98011 481-4892
WA7NIW	T	DICK RADFORD	3003 169TH AVE NE	BELLEVUE WA 98008 883-0662
N7NW	E	HAL GOODELL	35916 11TH SW	FEDERAL WAY WA 98003 927-7603
WN7NXC	A	LES JACOBS	143 NE 156TH	SEATTLE WA 98155 363-4169
WB7NXI	G	ALEX TAKACS	BOX 758 C/O SUN CNTRY RV PARK	WELLTON WA 85356???
WA7OEE	A	RON HENDERSON	P. O. BOX 573	ENUMCLAW WA 98022 825-1578
KB7DS	A	CHARLES FOLTZ	2820 179TH NE	REDMOND WA 98052
WB7OUT	T	TOM RAMUS	8722 17TH AVE NW	SEATTLE WA 98117 784-9243
WA7OXN	A	BOB MC GAHUEY	14840 PL NE?????????	BOTHELL WA 98011 488-7841
K7PBT	E	DICK GEHRING	21620 116TH AVE SE	KENT WA 98031 852-4289
K7PFR	E	JOHN BECKER	21112 NE 60TH PL	REDMOND WA 98052 885-1941
K7PHZ	A	JIM CARPENTER	2125 ELM ST	AUBURN WA 98002 833-9017
W7PRW	G	CARL BUTLER	16831 40TH SOUTH	SEATTLE WA 98188 242-6297
K7PZN	G	STEVE TOTH	410 NORTH 67TH	SEATTLE WA 98103 789-1554
K7PZX	G	KEN JACKSON	18944 33RD AVE SOUTH	SEATTLE WA 98188 246-7354
W7QGP	A	MARY LEWIS	10352 SANDPOINT WAY NE	SEATTLE WA 98125 523-9117
WB7QHO	G	MAX CRAIG	3006 SOUTH FERDINAND	SEATTLE WA 98108 723-8076
K7QMI	T	TIM SCHNEEBECK	4522 BROOKLYN AVE NE #103	SEATTLE WA 98105 634-0628
KB7R	E	JOE FANNIN	108 130TH PLACE NE	BELLEVUE WA 98005 454-6213
WA7RJT	A	CHUCK CRAZIER	13210 231ST SE	ISSAQUAH WA 98027 392-3764
WA7RJW	T	CHRIS HOLT		LEAVENWORTH WA
AA7S	E	BRUCE TRIMBLE	????	???
KB7ST	A	DENNIS ECKERT	1283 NW 191ST	SEATTLE WA 98177 542-1365
WA7TAI	A	GENE JACOBSEN	7334 126TH AVE NE	KIRKLAND WA 98033 822-3931
WA7TBP	T	TOM NEEDHAM	23921 SE 28TH	ISSAQUAH WA
WA7TIB	A	AL JENSEN	19111 1ST AVE NW	SEATTLE WA 98177 542-6052
WA7TRI	A	BOB DONNELL	4522 BROOKLYN AVE NE #316	SEATTLE WA 98105 634-2820
WA7UEW	T	DICK LUNDSTROM	34022 43RD SOUTH	AUBURN WA 98002 838-9559
WA7VEB	G	BOB LOSEY	21918 28TH COURT SO SPACE 10	SEATTLE WA 98188 878-4363
W7VIH	G	PAT SHINNERS	6412 17TH AVE NW	SEATTLE WA 98107 783-6710
WB7VJA	T	PATTI SUTTON	3516 343RD	FEDERAL WAY WA 98003 927-8581
WB7VLT	T	MARILYN FUNKHOUSER	6533 10TH AVE NW	SEATTLE WA 98111 783-9949
WB7VLW	A	RALPH FUNKHOUSER	6533 10TH AVE NW	SEATTLE WA 98111 783-9949
WA7WKT	T	ARNIE SKOOG	30617 2ND AVE SE	FEDERAL WAY WA 98003 839-2
WB7WNF	T	RALEIGH ELKINS	13506 CEDAR COURT EAST	SUMNER WA 98390 897-8
K7WTC	G	PETE HEDBERG	20904 NE 77TH ST	REDMOND WA 98052 883-8535
WA7YCM	E	ELMO SMITH	4716 SOUTH FINDLEY	SEATTLE WA 98188 723-4484
K7YR	E	KEN RAU	23206 SE 53RD	ISSAQUAH WA 98027 392-7954
W7ZLW	A	VERN NELSON	16812 NE 107TH	REDMOND WA 98052 885-0473
KB7ZS	G	JACK BURRELL	2432 138TH SE	BELLEVUE WA 98005 746-4176