



**Western Washington Repeater Association**  
**PO BOX 1001, Silverdale, WA 98383-1001**  
*VHF 146.620 MHz & UHF 442.650 MHz Repeaters (tone 103.5 Hz)*

#### Your WWRA Board of Directors

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## 2002 Newsletter Volume II Summer Edition

**A THANK YOU TO OUR MEMBERSHIP:** You have been very supportive. During the past months of not being able to get the high antenna repaired reducing our operating radius all of you have stuck with us. We thank you.

**FINANCES:** We have found that keeping the Membership's money in a Smith-Barney account was not in our best interest. Not only did we receive poor account service but also the money was at some risk. What little money we gained in interest, was lost during transactions. We would have to watch this account constantly and our charter is not financial investment but maintaining the Membership's repeaters. Additionally, we read some negative comments on interest versus service fees in the 1998 Audit Report, which seem to agree with what we found. So we put all the money into an interest bearing checking account. Our focus is maintenance of the repeaters. Audits are under Newsletters on the WWRA website.

**EMAIL:** All year we send out email Ops Bulletins to the Membership keeping the Members informed of changes in repeater status. A quarter of these bounce about every two months. Please keep us informed of your email address changes by clicking on Contact Us on the website.

**CONTACT US:** We are available. Bill, N7YT and George, N7GME are both Members of the Ops Committee and monitor both repeaters. We can be contacted via telephone and email. Email addresses are also on web. If you have any questions regarding the repeater feel free to call us.

**WWRA PATCHES:** Your Board has procured some patches that can be sewn on your favorite ham jacket or ballcap. We would like to give them away to the Membership but that would be depleting needed funds for the repeater maintenance. The Members donation is \$4.00 each and non-member patch collectors will donate \$5.00.

**REPEATER LOCATION MOVE & ASSOCIATED PROBLEMS:** In late 1999 and early 2000 our host, Channel 13, required us to move the two repeater cabinets to a new location inside the building. This move unfortunately disrupted many functions and brought on unexpected problems. With only two active workers on the Ops Committee we are still working on some of these problems.

**ANTENNA:** Our biggest setback however was not within the repeaters but our high antenna. It is the 20-year old N connector problem at the top of the high antenna, which gave us a high SWR back in the fall of 2001. We initially thought it was only moisture in the antenna coax. We installed a desiccant pump and took some other steps but the problem kept reappearing. While getting our tower climber up there twice within 11 months we also tracked down many sources to purchase spare connectors only to find out they did not exist. Our coax was purchased 20 years ago at the very same time it went out of production. Sources for spare parts dried up over 10 years ago and as luck would have it no spares were ever stockpiled. Looking through some history we learned that on the very day the air-filled coax was installed those many years ago the N-connector at the very top of the coax was damaged. It has been damaged for over 20 years. It has been repaired at various times and has worked well for many years but causing sporadic problems. Last year this questionable connector failed again and we finally lost our high antenna. We immediately had it repaired in the fall of 2001 however it took us some time and research to actually figure out what we really needed to do to make a permanent fix. We are waiting to install a second foam filled coax so that the UHF and VHF repeaters have separate coaxes. VHF will be on the more reliable foam filled coax and UHF will be on the old air filled coax. If there is another connector failure it will be on the less used UHF repeater. This second coax install is dependent upon our tower climber who at the time of printing is recovering from an accident. We got a good deal on 440 feet of new LDF5A coax picture here.



**N-CONNECTOR:** To help you understand this N-connector issue we must dedicate a short separate paragraph to this particular problem. The top N connector on the high antenna end attaches to the coax solid aluminum center tap by several fingers that makes a mechanical attachment to the coaxes center core wire. Since it is aluminum it could not be soldered as first thought. Three of these fingers are broken off obviously weakening this attachment point. There are no replacement connectors left anywhere on the planet. We checked! So the tower climber did a major overhaul and cut off the top piece and re-attached this N connector with the missing fingers using great dexterity and an overhaul kit supplied we got from the manufacturer [this kit was available] doing the best he could. Now, this particular fix, the cutting off and re-attaching had never been done before. It was accomplished in excellent weather with all the proper tools so we have high hopes it will last. This repair is on the air filled coax of course, the more preferable of the two types of coaxes. Our high antenna operation rests solely with this connector until we get the second coax installed.

**DEHYDRATOR PUMP:** This may be a good time to explain what our dehydrator pump does. First of all, an air filled coax has the least line loss of all coaxes that we may utilize for our repeater setup so therefore is the most preferable. However, it needs to be kept dry. We had a nitrogen bottle connected to this coax but because of the porous nature of the coax wrapping it would continually lose pressure and was a hassle and costly to keep changing. We installed the dehydrator pump and have a continuous pressure in the air filled coax. We keep the nitrogen bottle filled on station as an emergency backup.

**INVENTORY:** We need two volunteers to help us do a proper inventory of WWRA equipment on the hill. Contact Ops folks via phone or email. This inventory needs to be separate from the audit.

**SUPPORT:** We need people like Drake, KD7GAR who conducts the Net the second Sunday of every month. Drake is a responsible self-starter who has stood by the repeater Membership and has always been there with his dedication. Thank you Drake for your perseverance. We are



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always looking for a few good people who want to serve. Especially on the Ops Committee or our most important administrative support, the Board of Directors. People who are interested in staying engaged, taking charge of responsibilities that need to be done and which may not be to their liking or be slightly inconvenient to their schedules. The repeater needs the type of helpers who work problems through and have a genuine interest.

**AUDIT BOARDS:** It is important for the General Membership to provide oversight of the people you elect to run your repeater. The Constitution provides for the audit board to be elected at the annual general meetings. This allows you to get involved right away if you are new, so volunteer to be on the next audit board. It is an opportunity for you to see our equipment and get details of how our finances are expended.

**OPERATIONS POLICY:** Included with this Newsletter is a copy of the current Ops Policy. It has been streamlined to make it user friendly. No more kilocycle ops, radio police or complicated Membership requirements. Read it and ask questions if necessary.

**AUTOPATCH & REPEATER CODES:** The auto-patch works on both repeaters. © Members will be the only ones with codes. If they become compromised we will change them, otherwise the current codes will remain active indefinitely. As the operations people complete more important tasks they will program additional capabilities.

**SPEED DIALS:** Speed dials for Members will be issued only upon request from a Member. Since the advent of cell phones 2 meter and 70 centimeter phone patch use has fallen precipitously. The Ops Committee will be more than happy to program speed dials if you so desire this feature. Email, phone call or letter will be fine. We need the local number you desire.

**RADIO DEPOT:** Dave Roddy, affectionately known as Radio Dave, has been very supportive in getting "hard to locate parts" for the repeater repair crew over the last year. Dave has setup a special account for the WWRA and gets parts to us yesterday or has them drop shipped from suppliers. Thank you Dave.

**WEBSITE:** Our website <http://www.wv7ra.org> has become a repository for WWRA historical data and current events.

**DUES:** WWRA dues are due on 1 January annually. The Board would like to thank the general Membership for your overwhelming response last year. Remember the WWRA repeater is Member owned and with your financial support we are able to maintain a working repeater system.

**HOW TO FIND OUT WHAT IS HAPPENING:** If you want to know what's going on with your repeater you have several options. Check in on the Net the second Sunday of the month, call one of the people listed above, send them an email or call them on the repeater. There is usually one of them around. Ops crew Bill, N7YT and George, N7GME are usually "keeping isolated" on the UHF repeater however they are responsible for both repeaters they monitor VHF also. You can also visit the WWRA web and click CONTACT US. The current and ongoing operations committee work is recorded as per the requirement in Constitution to report to the Board of Directors. This information is posted on there almost weekly. You have to read the Ops Task Tracking sheet carefully as the information is there on everything that is going on with repeater maintenance, upgrades and repairs. This newsletter refers to some projects that may or may not be completed at time of printing. You should refer to the Ops tasks to get the latest information. Or ask an operations committee volunteer.

**WEATHER on GOLD MOUNTAIN:** There is always weather up there. This winter when the wind is howling around your home think about clicking on the WWRA's weather site on Gold Mountain and see what is going on up there. You can get there via the website or direct via APRS. Eventually your Ops Committee will have a voice announcement capability built into the operation of both repeaters.

**OCTOBER HAMFEST:** The WWRA will be represented by the President, Treasurer and Chief Op at the next North Kitsap County Radio Club Hamfest held at the Kitsap County Fairgrounds on Saturday, October 12, 2002.

**WWRA SECOND SUNDAY NIGHT NET:** Drake, KD7GAR is on the 146.620MHz VHF repeater the **SECOND SUNDAY** of every month **AT 8:00 PM** running the net. This is a great time for new hams and Members to ask questions. Check in and say hello. It is open to all.

**TIME OUT TIMER:** A Federal Communications Commission (FCC) regulation requires a break every three minutes in repeater transmissions. Provide a chance for the repeater to reset during your long-winded QSO. During use of the auto-patch a 30-second reminder will be announced. Your party and you will both hear it. There is enough time for you to finish your call and hang-up. Don't forget to use the procedures outlined in the operations policy when accessing and securing with the repeaters auto-patch.

**STATION UPGRADES:** The VHF repeater is brand new and from reports far and near it is working at optimum levels. At time of this writing the UHF repeater is being upgraded and will be back in action as soon as we receive it back and can get it re-installed. The Link Comm RLC 2 controller operates both repeaters and was installed brand new in early 2001. It has taken us up until now to groom this very sophisticated controller and learn about its capabilities. We are still learning and as time goes on the repeaters will provide more services to the Membership. So, the whole station has been changed in the last 24 months and no longer resembles anything that was installed previously.

**GENERAL MEETING:** WWRA President Bob, KC7DRQ Comments. *I plan on having the next general meeting in January 2003. January is the month that all Memberships need to be renewed and everyone will be a voting Member. WWRA will send out postcards with date, place and time.* Also, consider being an active Board or Ops Committee Member, as we need Members who are willing to become engaged in supporting our repeater. Our technical repeater is demanding and volunteers work continuously. One of the reasons repeater work takes awhile is that when only a few people are involved, it takes longer to get things done. We need committed volunteers who will stay in touch. When the burden is shared properly the work is done sooner and we retain good people instead of losing them.