



Last issue Barrie Arnett, N7ATC, shared his experience installing radios on Cloud 9 with a discussion about the antenna and ground systems. In this continuation from last month Barrie discusses the electrical and antenna connections for a single side band transceiver (applies to both Amateur and Marine radios).

Radio Installation on Small Craft (Part 2)

– Barrie Arnett, N7ATC, Cloud 9

I do not ever run the power leads from my radios to a circuit breaker on the electrical panel. I use the fused cables that come with the radios and run them to a terminal strip. This positive lead then runs to the battery switch. If you have a fire or short in a breaker panel you may not have any communication when you need it the most.

One thing I see on sailboat installations when doing a marine survey is the connection of the antenna to the back stay is often not done properly. The wrong type of wire and not GTO-15 is often used. When GTO-15 cable is attached to the back stay it should be looped up so the conductor faces down. We do not want moisture entering this conductor. The conductor should be clamped with a U-shaped kernie (copper U-boat). This should be sealed with a lacquer, then sealed with a non corrosive water proof sealant and finally taped with black electrical tape. Wire ties supporting the GTO-15 should be black to resist UV, not white. This procedure should also be used when attaching GTO-15 to a vertical antenna.

On my sailboat there was only one insulator on the back stay a few feet from the top of the mast. The antenna connection was made in the lazette to the chain plate out of the weather. **DO NOT TOUCH THE ANTENNA WHEN TRANSMITTING!!**

American Boat & Yacht Council (ABYC) does not specifically address radio installations on recreational craft. I have been told that the National Electrical Manufacturers Association (NEMA) does have a standard developed for radio installations on vessels but it is available at significant cost (over \$150).

You can have the best and most expensive radio but if your counterpoise, antenna, and wiring are not done properly you will have poor communication. When cruising in the South Pacific more than 25 years ago I talked to hams in Seattle almost every day. We were able to be phone patched to friends and family often. We even talked from our boat to SYC hams on their boats when they were cruising in BC, and that was a lot of fun!

Got Your Ham License? Where Do You Go Next?

– by Chuck Steward, AI7V, Alert

Come to the January 10th meeting at SYC.

We will help with your radio gear! Answers to your radio questions?????

How can I really use my ham license in the Northwest and in boating?

We have lots of ideas! Talk way beyond VHF!

I don't have a radio or any ham gear yet—what should I buy?

We'll have some radios you can try! And some catalogs to look at.

How does this radio I bought work?

Bring it and your manual! We will help you use it!

What is an antenna?

We'll show you one of those too! And help you decide what will work best.

I have a radio but have been scared to make a contact!

Try one tonight – it's easy and fun! We will have you on the air!

Who do I talk with about radio help?

We will assign you an "ELMER" to help whenever you have questions!

You guys talk in too technical a language!!!!

Not tonight!!!! All your questions are good questions!

Come have fun...have a beer or wine and enjoy some real fun radio stuff...

CQ CQ CQ (This means we are calling YOU!!!!)

Two important ARC programs are coming up for members in January and February 2007. Both start at 6:30 p.m. following the short ARC business meetings. We invite you to attend the short business meetings as well.

The January 10, 2007 program will feature hands-on help for all those who are new to amateur radio. This meeting will be especially aimed at those just getting their licenses and also those who got their license last year but haven't used it much, or have equipment and operating questions.

The February meeting will give attendees help actually designing a coordinated radio system for both power and sail boats. This will include information on VHF (including new DSC), amateur radios, SSB marine systems including HF DSC and e-mail capability, AIS and other related matters. A focus will be on combined use of antennas, coordinating backup systems for safety, computer/chartplotter interrelationships etc. All boaters are welcome whether you have your amateur license or not. A good event to test your radio installation will be the Radio Rendezvous III at Port Madison on the weekend of April 14, 2007. If you have questions on either of the above programs, please e-mail Chuck Steward at csteward@elltel.net.