



President's Message

We have several long time hams who have joined our club. These include John, K7KF. Welcome.

Per the charge given me several meetings ago, I have found out about what up coming DXpeditions INDEXA will be sponsoring. This information was found at <http://www.indexa.org/dxpeditions.html>. We voted that individuals should support this if they wish to. I was assigned to ask for more information, I was not given it, just the same email as before. However, I did find the below.

Here are the [...] upcoming DXpeditions that INDEXA is supporting:

- Ducie Island, VP6DX, in March 2008
- Clipperton Island, TX5C, in March 2008
- Rwanda, 9X0R, in March 2008
- San Andres, HK0, in June 2008

We are now also responsible for the “76 machine” power bill.

We have also been asked to do a booth at Scout Expo in May. If you have any ideas on demonstrations or information

that may get 12-18 year old boys interested in our hobby, please, relay those to Trever, AE6HR or Dick, K7ZI.

Lastly, those interested in upgrading or helping others license or upgrade, you may be interested in study guides and training materials found at: <http://studyguide.eqth.info/>.

At The Last Meeting

Station Grounding

From Ray Congdon (summary of instruction from March club meeting)

Purposes of Station Grounding

1. Lightning

- Lightning is a localized Electro-Magnetic Pulse.
- The pulse results in a low frequency RF, damped ringing. 30-180 kHz primary frequency. The harmonics from the pulse extend far into the microwave band.
- The power in the pulse is in the Gigawatt range!
- Two primary methods of dealing with Lighting:

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1. Avoidance – minimize the “Footprint” of the protected area/equipment.
 - Reduce Charge “pooling” by lowering the site profile. Bonded network of conductors keeping all components (towers, buildings etc.) at the same potential.
 - Bleed off charges on point discharge sources to ground network. Reduces possibilities of dielectric rupture, thus initiation of Lightning strike.
2. Diversion – divert the RF pulse and the resulting induced eddy currents away from the protected site and equipment.
 - Best accomplished with a “Single Point Ground” system. Tie all protected points (equipment, tower etc.) back to the central point directly, no “Daisy Chaining”.
 - Minimize inductance in the system.
 - Large, Wide, short conductors.
 - No sharp bends.
 - Keep conductors shallow when burying to avoid attenuation of pulse on the way to the ground point.

2. Safety

- Electrical mains ground needs to be tied to single point ground system.
- Direct paths but can be more convoluted (60Hz, not RF).
- Insure all personnel contact points are connected to electrical ground.
- Check outlets and equipment for good grounds (neon lamp detector good choice).

3. RF

- Many of the same concepts as lightning grounding.
- Ensure that there are no dissimilar metal connections or that they are protected from corrosion (creates diodes!).

- Clean up the area. Scrap metal, unterminated coax runs, etc. will cause re-radiation of RF and potential mixing of signals, creating products and interference.

Preparing For an Emergency

Non-Radio

Nothing this month. If you have any suggestions, please email [Trever Adams, AE6HR](mailto:Trever.Adams@AE6HR).

Radio

Joel does an emergency communications net twice a month. The first Wednesday at 9pm on the “76 machine.” The other he does on the last Wednesday at 8pm on 28.400 USB.

Additionally, to work in the EOC, and possibly with other organizations, in an emergency we need to have several certifications. ICS-200 & ICS-700. ICS-100 is a great introduction and is recommended. These can be found at: <http://www.learningservices.us/FEMA/LMS>. When you have completed any of these, please provide your name, call sign, ICS number and date to Trever Adams, AE6HR, so that the club can keep a certification inventory.

Finally, Joel, as emergency communications manager, and Trever are working to create some training exercises where we actually simulate a few emergencies. Ideas are welcome.

Getting to Know the Club

This month we are going to get to know Bill Stenger, K6QOG.

Ham radio has been an interest of mine for most of my life. As a kid, born and raised in Fresno, Calif., I was intrigued by the idea of talking to someone “far away.” So my friends and I took a string, waxed it, and attached a tin can to each end. Good, but not good enough. Technology developed communications with wire that could

lay on the ground and operated on a 1.5 volt battery. Good, but not good enough. When I was 12 yrs-old I had a paper route and a ham was one of my customers. I built a crystal set and over heard one of his conversations, one-sided as it was. So I decided to save enough money to buy a Hallicrafters S-38D receiver where I could listen to the world. To make a long story short, I learned the code, studied the theory and passed my Novice as a Freshman in school, built a Heathkit AT-1, 25 watt CW rig, graduated to General a year later and Advanced several years after that. I also graduated up in radios and antennas. I collected QSL cards which I stapled together to form my "wall paper" behind my radio station in my bedroom. Several of my friends were also hams and we used to have lots of fun working cross-band (40m-10m) duplex style during the AM days before SSB.

I interrupted college by joining the Naval Reserve program where I easily qualified as a Communications Technician. I served two years in the Philippines and there I was introduced to the Navy MARS program. After leaving Active Duty I remained active in the MARS program by running phone patches between the States and Korea and Okinawa on 20m. When the Vietnam War ended I continued in the MARS program by relaying messages via RTTY (Radio Teletype on 80m and 40m). Over the years technology developed and cell phones were a more convenient mode for military members to talk with family and friends than sending "MARS Grams." Technology also advanced MARS communications to switch from RTTY to more advanced digital modes, such as MT-63 and the use of IRLP and ECHO Link programs.

After leaving the Navy, I went back to college and while in school I took up snow skiing. Being a non-wealthy student I decided to be a chaperon for a ski program operated by a local sports store. For watching 30 energetic teens on a Greyhound chartered bus, I got free transportation to and from the ski resort and a free all day lift ticket. How great was that! Skiing has been a passion

ever since. Oh by the way, I did eventually get my Bachelor's degree.

Skiing was not my only passion. After I got a job I took up another life-long desire: flying. When funds would allow I worked my way to a Commercial Pilot license with an IFR and multi-engine ratings. Flying has allowed me to see some wonderful sights from the air, e.g. Yosemite and Yellowstone National Parks, Crater of the Moon National Park in Idaho, circle Hearst Castle along the coast of California, the White Sands of New Mexico, the beautiful coast line of the Florida Pan Handle and even fly to Vancouver Island.

Another passion is travel. As a kid I loved to travel. I would hop in a car and go anywhere, just for the sake of traveling. Love of travel was a perfect fit with the military. Uncertain where I wanted to go and what to do, an opportunity to join the Air Force came knocking at my door. Well, of course, how could I not open the door? The 13 years in the Air Force I have visited most of the United States and several Asian countries. I enjoyed everywhere I went, but the most memorable place I visited was Iwo Jima. I looked down on the beach from a rusted Japanese machine gun nest dug into the side of the mountain and envisioned John Wayne in the movie "Sands of Iwo Jima." When I saw the movie "Saving Private Ryan," I thought this is how it must have looked like from the beach looking up. I also crawled into a Japanese cave that was sheltered from American bombs that gave me a new understanding of the sacrifices of war.

When working in Bakersfield I met Carol my wife. I was attracted to her zest for life and love of new experiences. Travel was high on her to-do list. The only experience I could not get her involved in is ham radio. She likes listening to the radio but that is far as she wants to go. She prefers spending spare time painting and she is a great artist. If we need to communicate when not together she uses the cell phone.

After we get our new house built we hope to do more walking, hiking and traveling. Hopefully,

the new house will allow me to have a better antenna system and continue to be active in the radio club.

Getting Ready (Training)

Please, contribute.

In The Shack

Trever, AE6HR, has been messing with ground plane antennas and tiger tails lately. He has found that burrs left on connectors are a bad thing. Additionally, tiger tails help with receiving signals in trucks. However, they cause poorer reception and transmission in cars.

Joel showed us a grab and go bag which he is working on. Interestingly enough it had several great items included. One of these was a solar panel.

Jim, KE7PTP, is working on a short wave listening antenna which he found at: <http://www.hamuniverse.com/shortwaveantenna.html>.



Additionally, he has put up a tower. He is using 7 guy wires and has the base hinged using 3 foot concrete stakes with plates bolted to the sides of each stake. The stakes are bolted to the base. His hinge looks like this:



Please, if you have tips each month, or interesting and/or rare QSOs please, provide [Trevor Adams, AE6HR](#) with your suggestions each month.

New HAMs

None known to Newsletter.

Recent Upgrades

None known to newsletter.

Sought/For Sale

Sought:

None known to newsletter

For Sale:

None known to newsletter

Club Calendar

Nets:

146.760	RCARC Friendship Net	9:00 PM Daily (PL 123.0)
28.400	RCARC 10 meter Breakfast Net	7:00 AM Monday - Saturday

146.760	RCARC Training Net	9:00 PM, April 2, May 7 (Every First Wednesday)
28.400	RCARC 10 meter Training Net	8:00 PM, April 30, May 28 (Every Last Wednesday)

Club Meetings and Activities:

April 8 Meeting	Fox Hunt Class & Demo
May 13 Meeting	Mini-contest
May Activity	Demo at Scout Expo (?)
June 10 Meeting	Field Day assignments/CW Demo.
June Activity	Field Day: 4 th Full weekend
July 8 Meeting	Fox Hunt Demo/Utah Hamfest attendance plans
July Activity	Fox Hunt

Aug. 12 Meeting	Emergency Preparedness
Sept. 9 Meeting	ARRL and Mel Parks
Oct. 14 Meeting	UNDECIDED
Oct. Activity	Jamboree On-The-Air / Radio Merit Badge (BSA related)
Nov. 11 Meeting	UNDECIDED/Club Nominations
Nov. Activity	Special Event Station with Pioneer Days
Dec. 9 Meeting	Elections/Christmas Party

If you have any suggestions or changes for these items, or for who you would like to see teach one of these classes, please contact Richard, K7ZI, or Trever, AE6HR with your suggestions.