



VACAVILLE, CALIFORNIA

VACA VALLEY RADIO CLUB

REPEATER
REPEATER
REPEATER
REPEATER
REPEATER
REPEATER
REPEATER

June 2010

President's Message

Hi All,

Sorry to have missed last month's meeting but I sprained my ankle while running. How come trying to stay fit is so painful?

June is a great month for amateur radio. There are a lot of contests, most notably the VHF QSO Party. And of course there's Field Day.

Field Day will be the main topic of discussion for this month's meeting. We will need to discuss equipment, antennas, operating schedules, etc.

So please bring your ideas and suggestions.

Looking forward to seeing you all on the evening of June 9th.

73,
Scott KI6YYZ

June Pizza Party Meeting Location

Because I live pretty close to downtown Vacaville, I did some recon work for our June club meeting which is a pizza party meeting prior to Field Day. After thoroughly analyzing two restaurants, Round Table Pizza and Pietro's #2, I decided that Pietro's #2 at **679 Merchant Street** is the better choice.

Round Table Pizza was not able to give us their usual room. Some lame scuba diving club will be in their having their own meeting. I can't imagine the food fight a ham radio club and a scuba diving club would have while eating pizza.

At Pietro's #2 we will have our own room at no charge

IN THIS ISSUE

Message from the President.....	1
June Pizza Party Meeting.....	1
Field Day 2010.....	1
Around the Shack.....	2
May Meeting Minutes.....	2
Got Batteries.....	2
The Other Woman.....	3
Pizza Menu.....	5

away from the restaurant noise with linen on the tables and a food server ready to serve. This is a full service restaurant however we will be **charging \$7.00 per person** for several pizzas and beverages to share. I am including in the newsletter a page from their menu that has the pizzas for your review.

The June meeting is usually pretty fun. We should be able to put together a nice plan for Field Day over pizza and sodas.

Field Day 2010

Field Day is here folks! The last weekend of June which is June 26 and 27 is the ARRL Field Day event around the world!

This is a time to put a club station on the air using whatever we have available and sharing the work of set up, operating, and take down. We have been on the air for Field Day for several years now. With good WX predicted, this year should be the same.

At our June Pizza Party Club Meeting we will put together a plan for our Field Day Station from power supply to radiator and everything in between. A press release has already been sent to *The Reporter* about Field Day so we're off to a good start.

This is the second most fun meeting of the year, don't miss it.

Around The Shack

By Jerry Olive KD6WKY

The amateur radio contest "season" wound down now with the last HF contest a few weeks ago sponsored by *CQ Magazine* called WPX. It was the CW half of the WPX contest which is right up my alley.

Propagation conditions however didn't recognize the popularity of this contest and therefore did not cooperate with the participants. I worked the contest casually over the weekend for a total of about four hours and worked 158 stations during that time. 154 of those stations were primarily west of the Mississippi in call areas 6 and 7. Only four DX stations total.

I got an email from Paul VK2PN in Sydney, Australia

asking what conditions were like here. Paul VK2PN experienced the same thing down under.

Interestingly of those 158 contest contacts, I have received Log Book of the World confirmations from almost 100 of them so far. This is a much higher QSL rate than I have experienced in the past.

I worked the contest mostly on 4Ø and 8Ø meters because that's where everybody was due to the conditions.

I had fun and that's what amateur radio contesting is all about. So we move on.

Currently a DXpedition in Palestine is QRV. E4X has been on the air for several days. This is a very rare location for amateur radio as you can imagine.

As much as I'd like to work this one, it's not looking good. I can barely hear E4X and only for very short periods of time. West Coast hams are all experiencing the same thing. This one is getting lots of activity in EU which is much closer. I doubt much power or any beam antennas are being used by this French group of hams in Palestine.

The Indianapolis Motor Speedway ARC W9IMS was on the air over the Memorial Day weekend. I work them every year. They print up a nice QSL card with a fast looking car on it with some interesting information on the back.

This weekend there are several ARC's on the air transmitting from various museum ships around the country. I worked KK5W aboard USS Callaway docked in Sugar Land, TX.

Two weeks until Field Day, time to get things ready. See you there! 73!

VACA VALLEY RADIO CLUB—2010 ELECTED OFFICERS

President: Scott Joseph, KI6YYZ
Vice President: Kim Ware, KI6JNX
Secretary: Jerry Olive, KD6WKY
Treasurer: Bob Hewitt, K6HEW

BOARD OF DIRECTORS

Director: Mike Vieira, W6MAV
Director: Chris Jones, KD7TQO
Director: Antonio Del Rio, N6ZGB
Director: Glen Mitchell W6JLX

APPOINTED POSITIONS

Net Control Chairperson: Kim Ware, KI6JNX
Activities Chairperson: Board of Directors
Newsletter Editor: Jerry Olive, KD6WKY
Newsletter Publisher & Distributor: Bob Hewitt, K6HEW

May Meeting Minutes

Due to scheduling conflicts, prior commitments, unplanned injuries, and overall bad timing, we did not have enough club officers in May to conduct an official meeting. Not sure if that's good news or bad news. Probably bad news.

We did have a program presented by Art Mayoff AB6HB which turned out very well.

Got Batteries?

Stan Horzepa, WA1LOU
Contributing Editor
June 4, 2010

This week, Surfin' solves the mystery surrounding our little friend -- the battery.

When I was a kid, I had a love-hate relationship with batteries. I loved those circa-1959 D- and C-cells when I powered up a toy and that toy performed as expected. I hated them when I powered up a toy and nothing happened.

I hated them even more when I popped the battery cover of my immobilized toy to find that not only had the battery died, but that it had taken the toy with it, spilling its rust-colored guts all over the inside of the battery compartment and beyond!

As an adult (also known as a "big kid"), not much has changed. I still have a love-hate relationship with batteries, but instead of D- and C-cells, AA-cells, AAA-cells and oddly-shaped mystery-cells power my current collection of toys.

In addition to a cornucopia of battery shapes and sizes available today, there have been improvements in battery technology since the "good ole days." Some of the batteries I use are one-shots, but many are rechargeable and I can recall none that have leaked since an errant cell ruined my favorite toy, [Robby the Robot](#).

Although I have been a battery consumer for more than a half-century, their workings were a mystery to me. Truth be told, as long as they worked, I did not care *how* they worked. But recently I needed to learn how batteries worked, so I turned up a couple of excellent Web sites that educated me on the matter.

[Battery University](#) rightly claims to be "an online resource that provides practical battery knowledge for engineers, educators, students and battery users alike. The papers address battery chemistries, best battery choices and ways to make your battery last longer."

The [Electropaedia](#) of battery and energy technologies "contains a comprehensive knowledge base about energy supply and battery technologies, battery applications, chargers and ancillary equipment."

Whether you are a battery novice or veteran, both Web sites are worth a visit. Until next time, keep on surfin'.

The Other Woman

Douglas McCray, K2QWQ

Determination and hard work brings a WW II battleship back on the air.

The Other Woman — that is what she has become known as, at least by the wives of those seduced by her charms. She is high maintenance to say the least. She is a large, strong lady, with an unmistakable profile and an insatiable need for attention from people to make her look good.

She is one of four sisters, called the Iowa Class Battleships, and she is known to her friends as “Big J.” She is the ex-USS *New Jersey*, berthed now in Camden, New Jersey, doing duty as a museum and memorial. Conceived in the late 1930s and built during WWII, the four Iowa class ships were, at the time, the most advanced collection of technologies then in existence. Ship construction, weaponry, radar and communications were all state of the art for that time and many years thereafter. Three football fields long and 15 stories tall, she dominates the waterfront. This is the story of how she acquired a new voice.

Three Hams — One Club

NJ2BB — The perfect call sign for the ex-USS *New Jersey* battleship, hull number BB-62. It was through the foresight of Joe Duffin, W2ORA, that we have this call sign to use by the Battleship New Jersey Amateur Radio Station (BNJARS) — pronounced “Bean Jars” by some. When Joe became aware of a plan to bring the battleship to Camden, he applied to the FCC for the call sign, assuming that like most other historical ships, the *New Jersey* would have a ham station.

At the same time Peter Greene, N2LVI, and Joe Cramer, N2XYZ, separately and unbeknownst to each other, decided to form a ham club for the ship. When they became aware of each other’s efforts, they got together with a cadre of interested hams and non-hams to create what was to become the Battleship *New Jersey* Amateur Radio Station. There was club stuff to be worked through, but everyone was mostly interested in getting to work.

Many skills sets were available, from people with previous military experience and others interested, willing and able to assume any of the many tasks needed to reactivate the communications systems aboard “Big J.”

Big J Arrives

The ship came home to the Delaware Valley on Veteran’s Day 1999, towed from Bremerton, Washington through the Panama

Canal by a Crowley Marine seagoing tug. On that day both shores of the Delaware River from Delaware Bay to the port of Philadelphia/Camden were well populated with spectators. A flotilla of small craft and US Coast Guard vessels followed in the wake of the huge ship as she and the tug made their way upstream.

She was first temporarily docked at the Philadelphia Naval Business Center, formerly the Philadelphia Navy Yard, from where she was launched on December 7, 1942. After a short stay, she was moved across the river to a berth at the South Jersey Port Corporation in Camden, New Jersey. She would reside there for 9 months while hundreds of volunteers, including the radio gang, swarmed over her, doing the innumerable tasks needed to make her functional, safe and presentable to the public.

It was decided early by the original curator, Scott Kodger, that the ship would be presented in her 1990 configuration and as much like a commissioned ship as was possible. Restoration to her original appearance would not be possible because of past US Navy major structural modifications.

very attempt would be made to restore the communications systems to working condition and all work would be done “Navy style”— no haywire repairs allowed. Most of the communications gear dated from the ’70s and ’80s and, at the time of decommissioning in 1991, she had a mix of HF teletype, satellite digital radio and assorted VHF and UHF systems.

When a ship is mothballed by the Navy for long-term storage, everything that is removable from the exterior of the vessel is dismantled and put inside including all antennas. All usable and classified gear is removed. The heartbreaker is much equipment left on board was demilitarized. “Demill” meant that it was disabled and made useless for resale by cutting wires and sometimes by working over the face of the equipment with a hammer. To see otherwise good gear in this state was discouraging but challenging.

Restoration Begins

The most important system to bring back on line immediately was the 1MC, the ship-wide announcing system. While not actually radio, it was vital to “pass the word” and is more than just a mike and an amplifier. It is a crucial part of shipboard operations and has 2500 W of solid-state amplifiers, 1000 speakers, hot spares, microphone and loudspeaker controls. The

Visit the Repeater online courtesy of Bob K6HEW at:
<http://www.jcis.net/~hewbob/vvrc/index.htm>

Club repeater in Vacaville: W6VVR 145.470 MHz(-) pl 127.3
 The W6VVR net call is Tuesday evenings at 7pm on the club repeater. All are invited to participate in this weekly meeting on the air. 73!

Additional local repeaters

WV6F 224.200(-) WV6F 440.025(+) PL 127.3
 W6OMF Repeater 224.540 MHz, PL 118.8 Hz

THE VVRC WELCOMES YOU

The Repeater is Published by the Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143, An ARRL Affiliated Club. Founded 1987, Chartered 1988 General Meetings: 2nd Wednesday of each month at 7:30 PM 420 Vine Street Fire Station.

Wheelchair accessible

IMC is used for alarms and everyday or emergency instructions to the crew.

There would be no working telephones for some time as the old PBX had met with the wire cutters and hammers big time, leaving the IMC as the only method to contact people aboard. Hams thought "Why don't we all carry handheld radios?" With every compartment a complete steel box, RF has a very difficult time getting around. With hundreds of compartments, the IMC would be the only way to pass information, locate people or sound alarms and had to be up and running immediately. BNJARS volunteers spent many hours repairing the demill damage. In less than a month, announcements such as "Now, all hands lay to the fantail" could be clearly heard on all decks.

We were by turns very cold and very hot during the renovation, especially in Radio Central. Summer was as hot and humid as New Jersey can get, with no fans, much less A/C. In the first winter we looked like clones of that French tire company mascot, what with all the layers of clothing. In summer, every layer legally permissible was removed and minimally helpful fans brought from home.

Radio Central — The Shack Takes Shape

Radio Central, the focus for most exterior (RF) communications, was the next project. The Navy differentiates "Exterior Communications" from "Interior" with the latter being telephones, intercoms and many signaling and indicating devices. The radio room had empty equipment racks, a deck crowded with the dismantled heavy fiberglass vertical antennas, a couple of banks of disabled teletype printers and not much else.

The wires and insulators for the broadband 2-6 MHz fan dipole antenna, the bow mounted 10-30 MHz discone-cage and the aft mounted 10-30 MHz truss vertical were found three decks below, snarled in a huge ball stuffed into a small space outboard of the transmitter compartment (see Figure 1). It took a conga line of radio crew strung along the passageways to move the long bundle of heavy gauge bronze wires, still bolted to many long, weighty metal and ceramic insulators (see Figure 2).

The fiberglass vertical antennas were moved to exterior decks, checked over, hardware found and repaired if necessary. Those we could not install ourselves were left for riggers.

There was much work just to get Radio Central cleaned up and available gear moved to correct locations. Moving heavy gear through the passageways and up or down ship ladders is hard work, especially for a bunch of not very athletic hams. Hand trucks are useless as every 10 feet the load had to be lifted over the sills of watertight doors. Vertical rigging was needed for the ladders between decks. Bad enough in winter, but in the hot weather with no air conditioning, it was just plain old grunt and sweat.

Dave Burgess, WA2TVS, Margaret Burgess, KB2BRR, and John Goheen, KB2ADL, located the ammunition magazine below decks where documentation had been stowed, so we were able to find information as to what was supposed to be

where, even if we didn't have the gear at the time. Fortunately, Uncle Sam saved almost every piece of paper ever used aboard.

Research from these documents and manuals established proper antenna locations, matched up the correct couplers and accessories, and located the coax runs. Some rearranging of the feed lines was necessary as the Navy had located the receivers on one deck and transmitters on another. Patches and cross-connects were made to terminate the feed lines in the ham shack. Fortunately, the Navy uses embossed metal tags on the end of every wire, so it was relatively easy to identify them.

RTTY the Old Fashioned Way

Since radio teletype (RTTY) had been a major part of naval communications from WWII on, the *New Jersey* had several pieces of these electromechanical marvels aboard, mostly intact. Ed Clark, W2KP, had been a US Navy teletype technician and was indispensable in adjusting and repairing the complicated equipment. When a visitor to Radio Central breaks a light beam sensor, a teletype machine starts and clatters out a printed message read from a loop of perforated paper tape.

A former cryptology space behind Radio Central was designated as the NJ2BB ham shack. It had only a couple of empty shelf racks so operating benches were constructed, feed lines identified and brought out through a patch panel to the new operating positions. Power, HVAC and lighting were also attended to.

The BNJARS station now has five HF (see Figure 3) and one VHF/UHF position, all equipped with ham equipment donated or on long-term loan and running most analog and digital modes. The most recent addition is a Harris URR-119 and its companion 500 W remote controlled autotune amplifier, which allows us to operate military radio from the NJ2BB shack.

The ship is moored in the Delaware River. The mooring has no nearby residences or businesses to either make noise in our receivers or be bothered by our transmitters, making it an excellent RF location. The shack is basically a closed metal box, and the steel ship, floating in the water, provides a near perfect ground. Even the power lines into the shack are equipped with RF filters because with operations on several frequencies simultaneously, the Navy needed serious isolation, grounding and filters to insure that RF stayed where it belonged.

The HF antennas are broadband and like the V/UHF radiators, mounted high and clear. With the Navy antenna matching panel in operation, we put out good signals on all bands with average ham rigs.

On the Air

In late 2009, most of the correct gear is aboard and on display or in actual use. NJ2BB is operated by BNJARS for visiting hams and as a teaching scene for youth groups of all kinds, JOTA, the Scout Jamboree On The Air, being one of them. The annual Historic Museum Ships on the Air event is another operating highlight featuring contacts with historic ships worldwide.

PIETRO'S FAMOUS PIZZAS

	12"	14"	16"
Cheese <i>With tomato sauce. A classic.</i>	\$12.00	\$15.00	\$18.00
Super Special <i>With cheese, salami, pepperoni, mushrooms, sausage, green peppers, onions, and tomato sauce.</i>	15.00	19.00	23.00
Gino's Special <i>With cheese, Canadian bacon, beef, mushrooms, olives, and tomato sauce.</i>	15.00	19.00	23.00
Vegetarian <i>With cheese, mushrooms, olives, onions, green peppers, olive oil, and tomato sauce.</i>	15.00	19.00	23.00
Bianco <i>Creamy white sauce topped with Parmesan and mozzarella.</i>	13.00	17.00	21.00
Hawaiian <i>With cheese, tomato sauce, ham, and pineapple.</i>	15.00	19.00	23.00
All Meat <i>With cheese, salami, pepperoni, linguisa, ham, sausage, beef, and bacon. Delicious.</i>	17.00	21.00	26.00
	Price per topping		
Additional Toppings <i>Cheese, salami, pepperoni, linguisa, mushrooms, anchovies, sausage, green peppers, onions, ground beef, bacon, olives, pineapple, fresh garlic, Canadian bacon, pesto, and spicy chicken.</i>	1.50	1.75	2.00
Speciality Toppings <i>Artichoke hearts, shrimp, or roasted red pepper.</i>	2.00	2.50	3.00



PLEASE RENEW YOUR MEMBERSHIP

VACA VALLEY RADIO CLUB, INC.
MEMBERSHIP APPLICATION / RENEWAL FORM

Please Print & Fill in Completely

Dues are delinquent January 1st

Name: _____ Call Sign _____	MEMBER Dues ----- \$20.00 _____
Street: _____	Each Family Member -- \$ 2.00 _____
City: _____ Zip: _____	Student ----- \$ 5.00 _____
Phone: (_____) _____ - _____ OK to Publish ?(_____) _____	Repeater/Autopatch donation --- _____
License Class: _____ ARRL Member ?(_____) _____	Call/Name badge ----- \$10.00 _____
E-Mail Address _____	Optional ARRL membership
FAMILY Member (Spouse or Children)	ARRL dues ----- \$37.00 _____
Name: _____ Call Sign _____	ARRL dues (Senior) ---- \$34.00 _____
License Class: _____ ARRL Member ?(_____) _____	Senior is 65 yr or older with one time proof on age.
Name: _____ Call Sign _____	Total ----- _____
License Class: _____ ARRL Member ?(_____) _____	Paid by CASH: _____ Check # _____

Mail to : Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143