



P.O. Box 1005, Newcastle, CA 95658

July 2012

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At The Key of SFARC:

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Charles Baker, AE6LR
Gary Martinez, N6UWQ
Jim Griffith, K16AZH

FIELD DAY CHAIRMAN

Al Martin, NI2U

REPORTERS

Satellites: Greg, KO6TH
History: Gary, KQ6RT
Misc Radio: Fred, K6DGW
Sunshine: Richard, WA6RWS
rkuepper@ymail.com

REPEATERS

145.430 (-0.6 MHz/PL 162.2)
440.575 (+5.0 MHz/PL 94.8)
223.860 (-1.6 MHz/PL 100.0)

CLUB NET

Thursdays, 7:30PM, W6EK/R
145.430

CLUB MEETINGS

Second Friday of the month,
7:30PM at the Library, 350
Nevada St, Auburn CA

CLUB BREAKFAST

Last Sat of the month at Susie's Café
Cirby at Riverside, Roseville – 8:00 AM

NET CONTROL OPS

Dave Jenkins, WB6RBE
Gary Cunningham, KQ6RT
Norm Medland, W6AFR
Casey McPartland, W7IB

NEWSLETTER EDITOR

Barbara Anderson, W6EVA
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WEBMASTER:

Carl A Schultz, WF6J

**Photos from the
SFARC Field Day**

See page 3 for details



Happy 4th of July

Inside this issue:

- ***President's Report***
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Calendar:

Fri 13 July: Regular Meeting

Sat 28 July: Club Breakfast

Sat 20 Oct: Cystic Fibrosis bike ride-
Newcastle vicinity

We encourage members to receive Sierra Signals via email to save the Club the cost of reproduction and mailing

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President's Report

Field Day 2012

As I drove up past Colfax on Saturday morning, the weather turned cold and crappy as I approached Nyack. It was an unusually winter-like day for the latter part of June when I arrived on *Mt. Nyack*, which was to be the future home of the W6EK rare DX station.

Upon my arrival, I observed an odd assortment of cars, pickup trucks, tents, and motorcycles arranged in a perimeter around a huge monster of a portable Yagi antenna. Folks were busily setting up tables, tents, and radios at various locations, while Alan, KI6WDV, was running around shooting wire into the trees with a bow & arrow. It was controlled chaos at its finest.

This year's Field Day was special for me, not because it was my first, but rather it was my first Field Day *and* I had just purchased a new (well, new to me) Icom IC-746 *and* it arrived the day before Field Day *and* I brought my new radio to Field Day with me *and* I got to test it out thoroughly with the aid of many very experienced hams who each had great methods of testing. Four of us stayed up working everything from Xerox on the east coast to stations in Hawaii until midnight. Carl, W6FJ, and Dennis, WU6X, became a rare DX station high atop *Mt. Nyack* for about two hours. In the morning, we started stirring at about 0630 and hit the airwaves at 0700. I worked 40 or so stations in about an hour or two until folks decided to pack it in. The sun did finally come out, but only when we were tearing down the Yagi.

This was a first ever Field Day for me and I wasn't alone. Justin, K6UVK, made the trek up with his dad and tent-camped out in the frigid cold. Dave, KJ6NNW, apparently didn't get the memo and dressed for the balmy Auburn environment; he was the only one there in shorts. Dave made it a couple of hours before succumbing to the temperature and heading back to Auburn. For all three of us new hams, this was a first. I think we all learned plenty on this trip.

A few observations: First, there was an amazing amount of camaraderie at this event. Everybody was lending everybody else parts of all types so everyone who brought a radio and wanted to use it, could. Second, it was incredibly cold in Nyack. Folks were scrambling for gloves, hats, and warm clothing all day long; next time we should do this in the summer. Third, and most importantly, I discovered that 20 meter phone and 20 meter CW *do not* peacefully coexist, *ever*.

I'd like to thank a few people who make Field Day possible for SFARC. Donna, W6CQX, our chef, is a Field Day veteran but this was her first with a call sign. Al, NI2U, did an outstanding job organizing everything. Dennis, WU6X, made the logging possible and setup an amazing infrastructure. George, KG6LSB, and Richard, WA6RWS, (I have no idea what they did but they looked good doing it). Bob, WE6C, with his crank up tower and tireless CW keying and Carl, WF6J, did a fantastic job publicizing our event. There were several visitors to our little encampment. We even got a visit from our newsletter editor, Barbara, W6EVA.

Thanks for a great first Field Day; I hope to see you all next year,



See website for more photos!



Above: Al Martin, NI2U

Left: 20m Phone Station – Mike N6BRP & Bob K6UDA



Right: GOTA Station - Justin, K6UVK; Alex Anderson (first time on radio); Bob Wortman, WB6VYH

Below right: 15m Station - Bob, WE6C & Donna, W6CQX



Right: 40m Station - Dennis, WU6X & George, KG6LSB



Updated "un-official" Field Day 2012 stats ... but, getting pretty close to "official" at this point.

Really nice effort everyone ... much fun! Dennis – WU6X

Total contacts: 490 (not counting GOTA - see below)

CW = 169

SSB = 257

Digital = 64

Operators (that got logged)

Bob Brodovski = 85

Bob Naylor = 117

Carl Schultz = 80

Dennis Gregory = 151

Dick Wilkins = 40

Chuck Baker = 2

Mike Simpson = 12

David Allen = 3

2m = 6 (phone)

6m = 12 (phone)

15m = 83 (18-CW, 50-DIG, 15-phone)

20m = 241 (99-CW, 142-phone)

40m = 140 (52-CW, 14-DIG, 88-phone)

80m = 8 (phone)

GOTA = 31 (all 40m phone)

Guess on points

QSO points 723

GOTA points 31

BONUS points = 1,121

TOTAL POINTS (estimate) = 1,875

Participation

Members = 24

Visitors/Guests = 10

Sunshine report:

Dave Hund, N6SHD, had a stay at Kaiser Hospital. He missed Field Day due to his illness. We hope that he will be well again for the club breakfast and the July meeting.

Get well Dave!



BOARD OF DIRECTORS MEETING MINUTES

June 8, 2012

The SFARC Board meeting for June commenced at 1801 hours at Elm Avenue Round Table Pizza in Auburn.

Officers present: President Bob Brodovsky-K6UDA; Vice President Al Martin-NI2U; Secretary Dennis Gregory-WU6X and Treasurer Richard Kuepper-WA6RWS; Director present was Chuck Baker-AE6LR with Gary Martinez-N6UWQ and Jim Griffith-KI6AZH absent. Also present were Webmaster/PIO Carl Schultz-WF6J and guest Jim Carman-K6ARR.

REPORTS and DISCUSSIONS

President's Report: Bob and the Board reviewed the programs planned for the general meeting. Bob suggested we present Field Day *during* the meeting as "new business" rather than as a presentation; the Board agreed. Bob reported that field day T-shirts will likely not be ready for FD due to artwork issues, followed by a short discussion/review of membership promotion successes.

(Continued on page 5)

Secretary's Report: Dennis reported on logging software and laptops planned for Field Day. A separate laptop for logging will be setup for the GOTA station. The latest version of networked software is now tested and working over a wireless network.

VP's Report: no report

Treasurer's Report: Richard reported a beginning balance as of May 1st was \$2,907.29. Expenses in May totaled \$79.23. Deposits included membership renewals and donations totaling \$534.00. Net cash on hand at end of May is \$3,362.06.

Repeater Reports: Richard reported the repeater has been working well. No progress on Yaesu replacement. Richard also reported on the receipt of the Club's ice chest and other items from a past officer. Discussion on repeater hang-time.

VE's Report: no report

Web/PIO Report: Carl reported success with Field Day promotions including invitation cards to pass out to groups like Boy Scouts, an Auburn Journal newspaper article (next week), and possible visit by the NBC affiliate TV station out of Reno. Sacramento Bee had no interest. Also, links on W6EK website to new FD information and to last year's event were noted for the Board. Carl also plans Pod-casts during the event.

Property Officer: Richard reviewed a new sign-out sheet for Club-owned equipment.

Other Discussions: The Board was unanimous in agreement to request funds from the Club to purchase the main course for Saturday night's bar-b-q during Field Day. Talk-in frequency for Field Day will be 146.580 simplex. Also, an IC-761 from an SK estate has been tested operational and will be brought to Field Day. Other items in the estate (an old repeater and a Hallicrafters SX-28 receiver will) be sold.

Meeting adjourned at 1844 hours. Submitted by *Dennis Gregory-WU6X, SFARC Club Secretary*

GENERAL MEETING MINUTES

June 8, 2012



The SFARC General meeting for June commenced at 1935 hours at the Placer County Library in Auburn. Present were Officers Bob Brodovsky-K6UDA, President; Al Martin-NI2U, VP; Dennis Gregory-WU6X, Secretary and Richard Kuepper-WA6RWS, Treasurer. Director present was Chuck Baker-AE6LR; Gary Martinez-N6UWQ and Jim Griffith-KI6AZH were absent. Also present was Carl Schultz-WF6J, PIO/Webmaster.

Bob-K6UDA led the membership in a Pledge of Allegiance to the flag. Officers, Directors, and a full house of approximately 45 members and guests were introduced.

REPORTS:

Past minutes – The May General meeting minutes, as published in the Newsletter, were unanimously approved.

VP's Report – No report

Treasurer's Report – Richard-WA6RWS presented the Treasurer's Report as: beginning balance as of May 1st was \$2,907.29. Expenses in May totaled \$79.23. Deposits included membership renewals and donations totaling \$534.00. Net cash on hand at the end of May is \$3,362.06.

Secretary's Report – New members were invited to receive a "Welcome" letter with information on the Club during the break.

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Repeater Report – Richard-WA6RWS reported that the current repeater has been working well.

Satellite Report – Greg-KO6TH reported on the new “CubeSat” craze. Compared to traditional multi-million-dollar satellite missions, CubeSat projects have the potential to educate participants and implement missions at much lower costs (~\$100K). Greg reported that several universities are planning projects. Kits are available at: <http://www.cubesatkit.com>

VE Report – Dave-NO6NO reported 10 elements were given with 7 passing. One new licensee actually took and passed all three exams.

Sunshine Report – Richard-WA6RWS reported that Jim-KI6AZH’s XYL had a recent operation. And, Jettie-W6RFF (present at the meeting) had a recent heart attack and actually drove himself to the hospital.

Raffle and Refreshments – Gene-KG6NYH and George-KG6LSB reviewed raffle and refreshment options.

OLD BUSINESS:

T-Shirts – Bob-K6UDA reported that Field Day T-shirts arriving before the event is in jeopardy due to an issue with the artwork. He enlisted assistance from one of the members to see if the issue can be fixed and T-shirt orders expedited.

Equipment Sign-out – Richard-WA6RWS reported he developed a sign-out sheet to keep track of the Club’s equipment on loan to members.

NEW BUSINESS:

Tech-Ten – Birton-N6UG gave an excellent presentation on different transmission types with excellent diagrams and definitions.

Presentation – A presentation on Field Day was given by Al-NI2U, Chuck-AE6LR, Carl-WF6J and Dennis-WU6X. Carl showed and explained a video of last year’s activities. Other subjects covered were site layout, operating positions (5 planned, plus GOTA) (Al), detailed explanation of the Get On The Air (GOTA) station planned (Chuck), and logging software (Dennis).

Announcements – Club net on Thursday’s at 7:30; Board meeting at 6pm on general meeting nights at Round Table Pizza; the General meeting schedule; Club breakfasts (last Saturday at Susie’s Café); the “Prepper Net” every other Wednesday on the 2m repeater at 7:30pm; see the Club website (W6EK.org) for more information or changing dates.

Presentation – Al-NI2U floated a motion, seconded by Bob-K6UDA for Club funds to pay for the main course planned for Saturday night’s bar-b-q at the Field Day site. The motion passed unanimously.

Other Business – Talk-in frequency for Field Day was announced as 146.580 simplex. A member noted this to be a “digital mode” frequency. It was suggested and agreed to change the talk-in frequency to 146.520 simplex. It was also noted that the W6EK repeater will be utilized by a Western States event during the weekend of Field Day. Jim-N6MED gave a report on his participation in a FEMA exercise held at Moffett Field during the past week, where real-life rescue simulation in a collapsed mock-up of a multi-story building, along with the setup of emergency medical facilities, was tested. Participation included many public service professionals and disaster volunteers.

The meeting adjourned at 2114 hours. Submitted by, Dennis – WU6X, Secretary



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Miscellaneous Radio

Radio Obesity

Obesity is in the news these days. We're told about it constantly .. adults are too big, kids are too big, and pets are too big. Even the First Lady is on a crusade, especially with kids, and the various government programs that take care of things like "What food should be available on a school campus?" are getting into the act. When I came home from war and married Andrea, I was a tad over 6'3" and weighed 155 lbs. I am now a tad under 6'2" and 210 lbs, so yes, I've gotten fatter [and shorter] in the 44 years since then.

Early last May, I encountered another form of obesity. The desktop we've had for about 8 years came down with a recurring case of the "Blue Screen of Death" which ultimately led to the "Screen of Ultimate Blackness." Eight real-years is close to 100 computer-years so I decided to spring for a new one and talked to Jeff at PC Solutions in Auburn. The old disk drive was only a year old, and he said he could fix me up with a new Windows 7 machine with my old drive as a second hard drive which meant a whole lot of data transfer I didn't have to do. And, after the usual exchange of things of value, I came home with the computer I write this on now.



Here it is, under the desk by my feet. Roughly 15" high, 8" wide, and maybe 2 feet deep. And, it got me thinking about obesity of another kind. In keeping with the first part of the second decade of the 21st century, it has all the usual paraphernalia, and surprisingly, is still mostly empty space inside.

The processor is an Intel I3-2100, dual-core, 3.1 GHz chip that would fit in my hand without the fan on top of it. There are two 500 GB disks for a total of 1 terabyte of disk storage. It of course has the usual 100Mbit wireless card, a RW DVD, a serial port [hams need these], and more USB plugs than I've found so far. It is decidedly faster than the old one ... a little project I'm working on using a PIC programmed in C compiles in about one-tenth the time that it used to. It also runs Windows 7, which is where obesity really popped into my mind.

Jeff told me that with Win7, I could get by with "only" 4 GB [four thousand million bytes] of RAM, "but I'd be disappointed in the performance." So, it has 8 GB of RAM, at least half of which is consumed by Windows 7. And, Windows 7 is just the operating system ... it doesn't really do anything to solve problems and provide capabilities like writing a newsletter column ... for that I need Open Office, which seems to consume another 500 megabytes of memory.

The advances in hardware seem rational to me, I expect microelectronics to get faster, smaller, and lower power over time. And I expect new technologies to come along that wouldn't, and probably couldn't have been thought of when I sent my first CQ as a 13 year old Novice. A phone then was either black and heavy with a dial, or a pink "Princess" model that you had to hold on the table to dial. If you had told me then that, when I was in my early 60's, I'd be carrying around a battery operated Motorola wireless phone with 10 number memories on airplanes powered by jet engines, I would not have believed you. "What is a jet engine?" What I have a harder time rationalizing is how the programs that do things on our computers have gotten so big, and how the operating systems that just sit there and handle all the parts have become hugely humongous.

So let's go way back to 1960. I'm a sophomore at Cal Poly in San Luis Obispo in the Math department, and the department gets a "computer." It's a Bendix G-15D, about the size of a fridge. It has several hundred vacuum tubes [mainly dual triodes], 300 or so germanium diodes, a photo reader to read punched paper tape, a tape punch, and a modified IBM Selectric typewriter. All [and I'm not kidding, all of its memory, including all internal registers] was on a magnetic drum. The "word length" was 29 bits ... 28 bits plus a sign bit, and there were just over 2,100 of them on the drum. That's two thousand one hundred words. Bytes were still in the future as were

kilobytes. Megabytes hadn't been thought of then.

The G-15 D [there's one on display in the Computer History Museum in Mountain View] could compute. It could add, subtract, multiply, and divide. It could read data and programs from punched tape, it could punch more tape with data, it could print on the IBM typewriter, and it could read the keyboard. Ours had the "Alphanumeric Enhancement," data input or output could be letters as well as numbers. Ours didn't have the 3 meters.

It had an "operating system" called Intercom 1000, and even with it in memory, there was plenty of space left for some surprisingly complex programs. For Poly Royal [annual open house] that year, Dr. Weston asked a friend and me to come up with something for the computer to "do" to entertain the parents.

We ended up writing a program we called "Psycho." You sat at the typewriter and asked it questions. The answers it gave were built from some key words in your question and very rudimentary English grammar rules, and in general, bore little if any resemblance to reality ... or your question ... or good English. You could "hypnotize" Ben [his name] with a succession sentences with "sleep" in them, after which Ben would type various things, none of which would make much sense. Any question with "wake up" in it would return it to lucidity. ☺

As we finished we thought, "This will never entertain anyone," but it did. In fact, a couple of Psych profs came over with a camera and filmed people obviously believing they were being understood by the refrigerator next to them. All in 2,100 words of memory.

Around 1950, an IBM Executive was quoted on TV that, "There's probably an international market for six or seven stored-program computers." Bill Gates, in the early days of MS-DOS, is alleged to have told one of his programmers, "640,000 bytes of memory has got to be enough for everyone."



As I thought about the incredible fatness of today's software, I realized amateur radio equipment has become obese as well. My early home brew transmitters had a VFO with a knob, a switch to transmit, a knob to peak the drive, and a knob to resonate the PA plate circuit. On/off was the plug in the wall.

For years my receiver was a Hallicrafters SX-28: 3 switches, 11 knobs, 2 dials, one meter, and no menus. It weighed just under 100 lbs, and it worked amazingly well, one of the great receivers of its day. I used it as SSB was beginning to displace AM phone, and while not designed for SSB, it worked good. The audio from the big bass reflex speaker was outstanding.

Today, my radio is an Elecraft K3: 68 switches, 15 knobs, 5 LED's, a moderately busy display, and I have no idea how many menu entries. To Elecraft's credit, it came from them with default settings that work just fine, and I very rarely need to go into the menus. You don't see 68 physical buttons because almost all of the ones you do see are dual function – either tap it or



hold it briefly. You don't see 15 knobs either, because the four to the left of the "Big Knob" are also dual function, and are 4 of the switches too. Software is what makes the K3 [and most of today's radios] actually work of course, and periodically, Elecraft comes up with new versions for the software which I download to my laptop [Windows XP, about half the memory consumption as this Win7 machine], and upload into the radio. In normal operation, in a CW contest for example, about the only control I ever need to touch is the "Big Knob." The K3 weighs less than the SX-28 ... OK, a lot less, although the Yaesu FP-1030A I power it with seems to survive gravity outages.



There are radios with minimum controls, my Elecraft KX1 is one example. 8 switches, 4 knobs, one display. It does have a couple of functions that require more than one switch to be used, and it does have menus, but again, I really never need them. It weighs about 10 oz with my ear buds, the paddle, and the LiPoly battery. The FT-817ND, a favorite with the "radio to the field" crowd, is another example. Covers 160m – 70cm, just about any mode, and has very few controls. Many folks hang it around their neck, my buddy Mike, KD9KC in El Paso, operates pedestrian mobile with his. There's a lot of control and selection buried in the menu system of course.

Everything I've mentioned except for my homebrew transmitters and the SX-28, have computers in them. My K3 is connected to my laptop running the N1MM logger in contests and I don't even really need to touch the "Big Knob." I can type a frequency in to the call window, press

Enter, and the radio will go there, or I can click on a spot on the band map. Have we reached the limit of "feature obesity?"

Well, it seems, "no." This is the brand-new Kenwood TS-990 ... or at least it's a mock-up of what it will look like. The photo isn't great, I scanned it off the back of the June issue of QST. People who went to Dayton say it was displayed in a hermetically sealed clear plastic enclosure and the Kenwood rep reluctantly admitted there wasn't anything inside – yet.



Without a manual, it's hard to come up with an accurate count, but the general belief is that there are somewhere between 140 and 160 front panel controls [i.e. things you can adjust or change]. Most of the switches and many of the knobs are at least dual function, and the buttons under the spectrum display are multi-function and programmable. If this isn't enough for you, there's a "MENU" button and we all know where that leads.

I do not for a single microsecond want to return to the non-feature-obese days of ham radio. I had a fantastic time then, when I was much younger, with much simpler equipment [that I actually sort of understood], and as memories, they are just super. CQ WPX CW today, with wall-to-wall signals, my receiver at 100 Hz bandwidth, and being able to copy just one of them at a time is also super. Impossible on my SX-28. And depending on how much longer I live, these may form super memories too. Who knows what future feature-obesity lies ahead?

I hope all the SFARC Dads had a great Fathers' Day,

73,

Fred K6DGW



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