

SEPTEMBER 2013

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

# SHORT SKIP



## Mayday, Mayday!

By San Fraser, KK6GMH

It was about noontime on Friday the Thirteenth of September, 2013, and though I'd been tuning around on two meters for quite a while, I hadn't been hearing much. Given that I was on an HT between two mountains on the Lost Coast of Mendocino County, California, I honestly wasn't expecting to hear much. In fact, I was just about to turn off my radio and keep hiking when I heard what I thought might be a weak signal on 146.610 Mz.

I waited for a little while, and then, hearing nothing, tried turning down the squelch. There was definitely somebody out there. Completely buried in static, yes, but they were readable enough.

"Mayday, mayday! This is Kilo Kilo Six..."  
"hiking, fell..." "...anyone hear me? This is KK..."

A distress call! I was overwhelmed by a flurry of thought and emotion, but I knew that I couldn't hesitate to respond.

"Kilo Kilo Six Golf Mike Hotel, to the station in distress. Do you copy, repeat, can you hear me?"

No response. I tried again, but could hear nothing but static. I tried turning up the volume, turning down the squelch, and even switching to nearby frequencies. I wasn't like I could get a better antenna out where I was, and I didn't know of any local repeaters I could hit. I thought I had to give up. There was nothing I could do.

It was in this rather cynical frame of mind that I suddenly remembered another way to improve one's audio. Briefly explaining the situation to my dad, I clipped my HT to my waistband and ran ahead up the mountain as quickly as I could.

I had just stopped to catch my breath on a small ridge when I heard the KK6 station flicker in again. I tried to respond but still without result. I heard the station again, followed by a stronger station, and then I lost the audio yet another time.

I continued up the mountain, stopping only after I had reached a high place from which it was rather difficult to continue. The audio continued to cut in occasionally, and though I could only hear small snippets of the conversation, I picked them out with great care. Each precious word would only be said once.

"...fell off the trail, and can't get up... broken ankle... can you move your... hard to get a doctor out... autopatch 911... don't know how to... Garberville... that repeater might be... emergency traffic... \*beep, beep\* autopatching 911..."

Try as I might, I couldn't make anything out after that, and though I did see a helicopter fly overhead about an hour later, I have no way of confirming that it was related to the incident. I later discovered that the reason why I couldn't contact the station was that I was attempting to call simplex while they were on the Garberville repeater, N6VA. I'm just glad someone got through to them, and that they thought to take along their HT in the first place.

I would imagine witnessing such an event would have been quite an experience for any ham, but perhaps especially to someone new like me, who had been licensed for less than a week at the time of writing this article. I am excited to see what else this hobby has in store for me, as well as to meet the rest of you on the air.

*Editor's note: San, KK6GMH, has only been licensed for a few days. She 16 year old high school student and one of our club's newest members.*

## Behind the scenes Watsonville Fly-In

Special to the Sentinel 09/07/2013

By Suellene Petersen

What went on behind the scenes at the 2013 Watsonville Fly-in Air Show? How do they manage to keep all the visitors safe and secure during the event? What role does emergency communication have in keeping people safe?

I decided to find out the answers to those questions. While most visitors to this event were sitting in comfortable chairs and enjoying the air show, I was being whisked in a golf cart to meet up with the gentlemen who organized Amateur Radio Emergency Services support for the event. My goal was to interview both Bob Wisner, emergency coordinator of Southern Santa Cruz County ARES, and his assistant, Clint Ramer. They were the people who could explain the system that seamlessly ties communications between all of the supporting units during this event.

There were 18 amateur radio operators assigned to cover the three-day event. The operators were stationed at strategic locations so that they could be in a position to do two things -- help the public stay safe and communicate any situation that needs attention. Critical to the communication structure are the shadow and net control operators. The shadow, Phil Peterson, relays messages to and from the air boss, who directs the fly-in and air show.

One of the main ways the air boss learns about any problem that could jeopardize the pilots or the visitors is through the shadow. The net control operator, Bob Perry, must know where all operators are stationed and their duties.

I met up with Wisner, who was stationed at a location that had been defined by an FAA representative as dangerous. A warning

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**CLUB MEETING FRIDAY SEPTEMBER 20, 7:30PM**

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By Art Lee WF6P

## CHATTER

A couple of Wednesday nights ago three of us from the Cal 34 sailboat Misty, visited Lin, on her Islander 30 sailboat on V dock. Lin's good friend, Captain (100 ton Coast Guard license) Frank Brauch, W2FWB, taught her to sail and delivered her boat to Santa Cruz. Frank often checks into the Baja Maritime Mobile net on 7.235.5 (0800 Pacific time). Who met us at the gate to the dock? Our editor, Ron, K6EXT, who regularly crews for Lin. They had been out on the Bay. Lin has to tabernacle her mast to get under the bridge, as do all sailboats in the upper harbor. Herb, WA6LOB, and I got pretty good at it when I crewed for him in the 1980s.

I am on Frank's email list as he heads down the coast, single-handing, to Cabo San Lucas, in Mexico. Two days before he left, I had the opportunity to visit his boat, a well-outfitted Golden Gate 30 sloop. I was tremendously impressed with the boat and her rigging. "I spent two years getting her ready," he said, and it shows. From the highly-reliable Monitor wind vane, past the solar panel array, to the plow anchor, it was ship shape. Frank's ham radio was tucked neatly up and out of the way, with the control head at the nav table. Complete with GPS, sextant, radar and charts, I couldn't think of anything he didn't have. I had a QSO with Frank when he checked in with the net on Tuesday, and received his underway email. He ran out of wind so motored past offshore drilling rigs. I'll have to ask him when he sleeps. I've solo-sailed in the past, but for less than 24 hours.

I received more aviation stuff from Patrick Henry, WA6PKM, our Gold Beach, Oregon member. Pat and I are aviation historians, so he sent the photo of a restored Navy N3N biplane. In 1946 when I enlisted in the Navy, we had phased out these "Yellow Perils" in favor of SNJs, low-winged monoplanes. Both aircraft were simple to maintain and fly and used as trainers for young Navy pilots. While Ralph, W6ENE, was flying as a turret gunner in TBMs at the Reserve Center at the Oakland airport, I was in the backseat of the NAS Alameda 'Js. We both had fun – and drew

## Radio Science for the Radio Amateur

by Eric P. Nichols, KL7AJ

The August 2013 issue of QST included Eric's article entitled "Don't Blame the Sun". It is written in such a lucid, informative and sometimes-provocative way it seemed imperative for me to purchase his recent book and to write this short review.

By way of introduction Eric has published many articles and two books on Amateur Radio and electronics. He has a long career as an engineer and scientist specializing in propagation research. He resides in North Pole Alaska; I dare say there is no better place to understand the electro-magnetic phenomena that most affect our hobby.

The book maintains the same reader-friendly style seen in the article. Unlike most textbooks each chapter comes across as someone telling a story while providing an introduction to the fundamentals of a wide range of topics of interest to us.

The key distinction between science and technology is made with the comment that we have become infatuated by the technology while neglecting the science. We are reminded that under FCC rules part 97.1 we are expected to contribute to advancement of the radio art. Clearly Eric believes we should do more in this regard and explains how to apply scientific methods; by which is meant disregarding pseudo-science, unscientific opinion, bias and folklaw.

There are 16 chapters in all and each contains a wealth of uncommon knowledge. Chapter 2 (for example) deals with safety concerns and it would be a surprise to many to learn that we could be killed by a shock from a 12v car battery. A chapter on Automatic Data Acquisition provides details of the hardware and software used to analyze the results of experiments. Chapters on the ionosphere describe many strange behaviors such as functioning as a mixer or an amplifier. The DX propagation mode called choral hop is explained, as is the significance of the angle of arrival. There are chapters on some familiar tools including Smith Charts, SPICE, Scattering Parameters and NEC antenna modeling.

The final chapters substantiate the initial premise that as a world-wide community of amateurs we are uniquely able to conduct credible decentralized ionospheric research. Three levels of experiments are described that provide details of signal fluctuations, polarization and vertical angle of arrival with respect to the sun, time of day and other variables.

In summary this is a compact book full of well-grounded scientific information laced with humor and practical examples. It belongs on any bookshelf alongside the ARRL Handbook.

—Ron Skelton W6WO

### Holiday Luncheon

Saturday, December 14 is our holiday luncheon at the Seacliff Inn; doors will open at 12:30, with luncheon starting at 1 PM, then our traditional raffle! Watch the K6BJ reflector for more details on these events.

flight pay at the rate of \$50 per month. That was a lot of money in the '40s.

I hope everyone saw K6CPA Suellene's article "Behind The Scenes At The Fly-in" in the September 8th edition of the Santa Cruz Sentinel. Suellene worked with Bob Weiser, Amateur Radio Emergency Coordinator, and 18 ham operators at the Watsonville Air Show. I don't recall the exact count of times Bob has served as ham coordinator at the air show, but is somewhere near eight to ten years. Bob and his volunteers do a great job in helping keep the public safe during the three-day event.

### Cal QSO Party

October 5th and 6th, 2013 – 47th running of the California QSO Party

2013 is the 47th running of the California QSO Party – "CQP" – perhaps the largest US State QSO Party! The objective of the CQP is to work as many stations in California as you can on both CW and Phone. Stations may be worked once per mode/band combination for points with California Counties (58 of them) as individual multipliers.

If your in California and able to participate in CQP, please register your county by visiting <http://www.cqp.org/>

CQP is a lot of fun and we hope to see you on the air!

—73, Chris N6WM – CQP Chair

Ian W6TCP - JUG, Newsletter Editor



Short Skip CAKE Our session on August 22 comprised a smaller group than usual but nonetheless lots of spirited discussion ensued.

It was a pleasure to have Glen KG0T join us. In keeping with our tradition there were two exhibits. Bob showed a section of double braided coaxial cable with an unusual shielded connector and asked us to guess its use. Ron's W6WO guess of low loss UHF could not have been "more wrong". David KG6IRW came closer with his guess of high power. It was designed for high voltage which given Bob's aversion to QRP, came as no shock his intent is to use it to build HF power combiners with very low transmission loss (tell us more next time please).

A quite different exhibit and demo was provided by Fred KJ600V. The heart of this was a Raspberry Pie computer programmed as gateway to an experimental part of the global D-STAR network. Fred used a 70 cm hand-held radio, his cellphone and the Abbey wi-fi and (without using our local DSTAR repeater) demonstrated Echolink connectivity between his devices and with a station in Connecticut traveling mobile using DSTAR. Fred said that IRLP could also have been used. David KG6IRW has been enjoying getting back to a prior life by writing code for the Raspberry Pie.

Gary K6PDL obtained a good deal on Drake TR7 and had some questions about the frequency stability of radios of that era. Could be a problem for the very narrow band digital modes like JT65 and WSPR which require at least +/- 1 Hz per minute stability. Gary also mentioned that Steve AC6P is generously providing him with help in constructing the donated Elecraft K1. There is no better tutor Gary. Don K6GHA described his visits to Navy museum ships in San Diego and in particular sitting in the ham shack of the USS Midway, pty propagation was so poor at the time.

Ron mentioned the fine set of articles published in the Centenary issue of the RSGB bulletin that included a report on the state of the art in 1922 by Sir Oliver Lodge, the original paper by Peter Martinex G3PLX who

invented PSK31 (among other digital modes) and the paper in 1958 by Louis Varney G5RV describing his antenna which is popular and somewhat controversial even today. Ron would like to obtain measured impedance data on the full size or half size versions. Glen mentioned that finding the location and time information of CAKE meetings was not easy and would like to see a calendar of all club events included on our Web site. Ron said he would bring this up at a future Board meeting. Ron expressed great interest in the article by the renowned Eric Nichols KL7AJ entitled "Don't blame the sun" in the current QST and has ordered his new ARRL book "Radio Science for the Radio Amateur"

Note that our CAKE sessions are almost always on the second and fourth Saturdays starting at 10:00 AM. at the Abbey coffee shop, part of the Vintage Faith Church at the junction of Mission St and Hwy 1 The date is included in Short Skip and there are frequent announcements on our VHF and HF nets I hope to see many of you on Sept 14th



Good night dear but please don't forget to wake me at 2:00AM as I expect a great opening on 160 meters

## Mentoring Project

There is renewed interest in establishing a mentoring project to help newly-licensed operators get their equipment programmed and get on the air. I would like to invite all seasoned operators who would be interested and available to respond.

Please reply to my personal e-mail: ki6tkb@yahoo.com

Provide the following: name; call sign; general location; areas of ham radio or computer expertise.

Degree of availability (answer a few questions over the air or able to come help set up an antenna?)

I will compile it and work with the Santa Cruz VE Group to make the list available to new operators.

—73, KI6TKB, Becky Steinbruner

## New Hams

On Saturday, 8.31.13, two young girls passed their Ham exams in Hollister. San is 16 years old and her younger sister, Maya, is 13 years old. They learned about amateur radio from the Steinbruner family. Then the girls independently decided to learn Morse code so that they could tap messages to each other on their adjoining bedroom wall and chat with each other long into the night. What fun for the two girls! I think that they need real radio equipment now, so if anyone has anything to loan or donate, I am sure it would be appreciated. San passed both the Technician and General level licenses while Maya passed her Technician license. The remarkable thing is that San got 35 questions correct on both exams and her younger sister, who had not been studying for more than a week, got a respectable score when she passed the Tech exam. Both young ladies are looking forward to joining our club. They are just waiting to discover their call signs so that they can complete the membership application.

—73, Suellene, K6CPA

## Fly-In continued

white line marked the no-enter area. The Watsonville police had assigned their cadets to assist Bob in monitoring this line. I stood guarding the line with him for a few hours while we discussed emergency communications and the air-show.

I asked him why the amateur radio operators volunteered to do this work? He said that since the operators are uniquely qualified emergency communicators, they were proud to volunteer their time and experience.

"Although thorough planning occurs, there is always the unexpected situation that pops up to test your ability to respond," he said.

The Ravens team performance coincided with the end of our interview. Watching this team fly in intricate formation sequences with the professional acumen that you would expect from the Blue Angels was amazing. Not only was I very impressed with the performance but reminded that regular training, attention to detail and organized communication are as paramount for safety in the air as they are for amateur radio communication on the ground.

I thank both the Ravens and Southern Santa Cruz County ARES for such a great experience at the 2013 Watsonville Fly-in & Air Show.

Suellene Petersen is the public information coordinator for the American Amateur Radio Relay League, Pacific Division, Santa Clara Valley Section.

### SCCARC Board - 2013

President	Robert Ritchey	KJ6FFP	
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### MONTEREY BAY REPEATER ACTIVITY

Santa Cruz County	K6BJ 146.790- PL 94.8 Santa Cruz (linked to KI6EH) KI6EH 147.945- PL 94.8 Watsonville (linked to K6BJ) K6BJ 440.925+ PL 123.0 Santa Cruz (not linked) K6BJ D-Star 441.675 +5MHz (D Star link: <a href="http://tinyurl.com/dstar-sc">tinyurl.com/dstar-sc</a> ) • SCCARC Net Monday 7:30 PM 146.79- /147.945- /147.180+ linked • SCCARC 10 Meter Net Monday 7:00 PM 28.308 MHz USB
ARES Net	SC County Wide ARES Tuesday 7:30 PM on 147.180+ PL 94.8 and 443.600+ PL 110.9 linked
San Lorenzo Valley	WR6AOK 147.120+ PL 94.8 Ben Lomond • SLV Net Thursday 7:30 PM
Loma Prieta	AB6VS 440.550+ / AE6KE 146.835- PL 94.8 (linked for net) • LP ARES / LPARC Net Tuesday 7:15 PM
Monterey	K6LY 146.97- PL 94.8 / 444.700+ PL123 (linked for net) Monterey • Monterey Co. ARES Net Wednesday 7:30 PM K6LY 146.970- (PL 94.8) • NPSARC Net Wednesday at 8 PM on K6LY/R
LPRC	WR6ABD 146.640- PL 162.2 / 442.900+ PL 162.2 (winsystem.org) • LPRC Net Tuesday 8:00 PM 146.640-(PL 162.2) • Amateur Radio Newslines broadcast Tuesday

• Santa Clara Valley Section Traffic NET Tuesday 9:00PM 146.640- (PL 162.2)

FOR MORE INFO SEE: <http://www.k6bj.org/freq.html>

### SCCARC Calendar of Events

ARES Meeting (prior to club meeting)	Friday	Sep 20
SCCARC Meeting	Friday	Sep 20
Cake Meetings	Sat	Sep 14, 28
Board Meeting	Thur	Sep 26
Short Skip articles due	Mon	Oct 7
SCCARC Meeting	Friday	Oct 18

### MONTHLY MEETINGS.

The SCCARC Meets at 7:30 PM, on the THIRD FRIDAY of the each month (except December). Meetings are at Dominican Hospital, Education Center, 1555 Soquel Drive, Santa Cruz

### Net Control Schedule:

9/16	Lou NJ6H
9/23	Becky KI6TKB
9/30	Chris KG6DOZ
10/7	Phil KE6UWH
10/1	Tom K6TG
10/21	Lou NJ6H

Short Skip is published 12 times per year.  
Free to members.

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Columnist: Art Lee, WF6P  
Writer: Ron Skelton, W6WO

## November Election and Auction

Friday, November 15 will be our annual election of Officers and Directors as well as our annual auction. Active members may run for any Officer or Director position. The auction is a great opportunity to pass along your usable but excess items while supporting your Club.

## Treasurer's Report

The July 2013 Treasurer's Report presented to the Board of Directors showed that the SCCARC treasury had \$4014.78 in cash and bank accounts (total less encumbrances: \$3387.78). At that time all financial obligations for which

invoices had been received had been met, including the annual equipment insurance premium. The full Report, incorporating the current working budget as well as actual and projected income and expenditure figures for the full calendar year, will be available for review at the September 20 Club meeting.



**PACIFICON 2013**  
October 11, 12, 13 Marriott Santa Clara



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