

DECEMBER 2008

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

SHORT SKIP



The Iceman sigs Cometh over the Pole:

Check you logbooks, see if you have worked Iceland... Pretty rare, Then check to see if you worked Thor, TF4M. Thor is an interesting fellow, I have worked in the past, and is notable for his Rhombic Farm in extremely remote North West Iceland, a beautiful QTH, a 4 hour drive from the capital city, Reykjavik.



Thor, TF4M

I have been talking to Thor recently, via Skype, hoping he is weathering the incredible financial Disaster precipitated by their version of Wall Street, and their similar crimes....

I was concerned about how the financial disaster in Iceland, distributed among only the 300K population there, was affecting him, personally. It was worse than I thought. So bad that by next year, 1/3 the population, 100,000 people, mostly younger folks are moving out of Iceland. Want to buy a DX qth home cheap?

Nine months ago Thor and I were comparing costs of living in Iceland vs USA, and I learned that a beer at the local pub (40 miles from Thor's QTH) was \$14.00 (ouch!) Now the same beer at the same pub, if you have USD, is \$1.50 due to the plunge in the Icelandic dollar. Thor says it will take many generations of Icelanders to recover from the Stock market crash they experienced, but he said they are hardy folks (Vikings) and they will prevail



Thor at work on one of his rhombics



View up the pole from the feed points, of the European Rhombic, and the USA rhombic.



Thor's home and portions of his rhombic farm in the valley, near the Town of Bildadular

It is really good to be able to assign a real person/personality to the powerful (usually) Morse signals coming across the pole from Thor's incredible station. Thor's construction accomplishments of Rhombics and Beverages, reminds me of similar, done by the immortal Don Wallace, W6AM, down in Palos Verdes. He put on a strong showing in the CQ WW this year, check out his scores on his website, <http://www.tf4m.com>.

Anyway, my satellite earth station work has spawned the idea that his location might be a killer location for a commercial, and hopefully, an EME dish. Take a look at some of the incredible pictures of his QTH. I am running that idea by some folks in the industry needing a high latitude earth station. If it pans out, it might be a chance to do some guest operating at TF4M. I hope so.

—Best, 73, de Pat AA6EG

CLUB MEETING FRIDAY JANUARY 16, 7:30 P.M.

Amateur Radio Direction Finding in Bulgaria

ARDF, also known as radio orienteering and radiosport, is an amateur racing sport that combines radio direction finding with the map and compass skills of orienteering. It is a timed race in which individual competitors use a topographic map, a magnetic compass and radio direction finding apparatus to navigate through diverse wooded terrain while searching for radio transmitters. The rules of the sport and international competitions are organized by the International Amateur Radio Union. The sport has been most popular in Eastern Europe, Russia, and China, where it was often used in the physical education programs in schools.

ARDF events use radio frequencies on either the two-meter or eighty-meter amateur radio bands. These two bands were chosen because of their universal availability to amateur radio licensees in all countries. In the UK events with somewhat different rules are run on 160 meters. The radio equipment carried by competitors on a course must be capable of receiving the signal being transmitted by the five transmitters and useful for radio direction finding, including a radio receiver, attenuator, and directional antenna. Most equipment designs

integrate all three components into one handheld device.

Fox Hunting in North America generally involves finding one hidden transmitter by driving around all day in an SUV equipped with directional antennas. ARDF in Bulgaria, on the other hand, involves running over rough terrain carrying a portable receiver and finding multiple transmitters. Just to make it more difficult, the transmitters are carefully hidden in the forest over an area of several square kilometers. Running through this terrain can be a good physical workout. This sport is not recommended for your overweight couch potato style ham radio operator.

During my recent visit to Bulgaria it was a pleasure to see the sport attracting so many young people. Clearly this is an event in which the whole family can and does participate. The awards ceremony at the end of the weekend was a big hit and almost everyone went home with a certificate of some kind.

—Peter Jennings AB6WM

PS On his web site Peter describes his many ham and hang gliding travels in Bulgaria and elsewhere.

Wireless World

Our Wireless World As a budding young engineer in the 50s my favorite technical magazine in the UK was called "Wireless World". It always had the latest designs and projected an exciting future of applications. Pick up many a magazine now and it is not hard to find extraordinary examples of wireless applications well beyond the imagination of those times. I found these in the current issue of the "IEEE Spectrum".

A technique that uses radio frequency energy to extract oil from shale (according to the DOE the US has 2 trillion barrels of the world's 2.6 trillion barrels of shale oil). Oil producers would lower antennas into a well and heat the shale to reduced the oil's viscosity enough to pump it to the surface.

A Neurostimulator is a battery-powered medical device implanted in a patient

to control chronic pain. The battery is recharged wirelessly and the patient can control the stimuli with an inductively coupled programming wand.

The latest ultralight notebook computers include the draft IEEE WiFi 802.11n 108 Mbit/sec standard that uses power more efficiently than 802.11a/b/g. Manufacturers can now embed 3G and other broadband RF chips and antennas, yielding better performance and consuming less power.

In the magazine's recruitment section I note RF engineers are in demand on a wide array of subjects including; through-the-wall sensors, hardware-in-the-loop simulation, and several applications for high power microwave Radar.

If you have any unusual examples of our Wireless World drop a note to our Ron K6EXT our esteemed. Editor.

—W6WO

WSPR SETS NEW DX RECORDS

A newly developed digital mode is breaking all sorts of QRP records. Its called the Weak Signal Propagation Reporter. It was developed by the man who gave us WSJT: Joe Taylor, W1SJT. Taylor calls it WSPR. Justin Giles-Clark, VK7TW, is in South Hobart, Tasmania, is here to tell us of the of the distance records broken and other that have been set:

Back on Friday, 31 Oct, Bob VK7KRW had a two way contact with Richard, N2JR, in Virginia, USA. on the 80M band, over a distance of 16300Kms and both stations were running 2watts, yes, only 2 watts!

Bob's antenna is an Inverted V dipole and Richard was using a Butternut ground mounted vertical. The SNR at that stage was around -25dB.

Bob VK7KRW has been recently experimenting with WSPR on the HF bands (15, 17, 20, 30, 40 & 80M) and he has had a number of QRP contacts into the UK, EU, JA, USA, Canada and ZL.

Bob mentioned that he reduced power to 1W and he was still received by Richard but unfortunately heard nothing in return at that power level.

Later that evening Bob received an email from Pat, F6IRE, who runs the WSPR net, confirming that we had set a new world distance record for a two way QRP contact on the 80M band. Bob mentioned that stations in the Northern hemisphere are desperately looking for more stations in the southern regions so if people want something to experiment with, try WSPR.

A call went out on the VK7 Regional News and records started to tumble with Dick VK7DIK making a bilateral contact with Joe Taylor K1JT over a distance of 23352km on 40m with just 5 watts.

The powers just keep reducing and distances just keep increasing. Larry WB3ANQ was able to get through to VK6DI using just 5mW (+7dBm) over a distance 18615Km.

WSPRnet.org has all the information required and links to the software. The URL is: <http://www.wsprnet.org/drupal/> — VK7TW. for Amateur Radio Newline



By Art Lee WF6P

CHATTER

During the November club meeting, we were introduced to Jerry Enman, AE6I, our new EC for Santa Cruz. With the fire season just over, Jerry can stand by for floods, earthquakes and mud and rockslides headed our way this winter. It could be a good, wet winter (or not!) this year.

Tom Stollar, AE6XQ, had some help from everyone's dear friend JV, K6HJU, putting up new antennas and coax for his towers. Tom said they had been in place for a few decades and needed refurbishment. He wants to be ready when the sun spot cycle begins its upward climb in earnest.

The November club meeting was fun. The auctioneer was Don Taylor, K6GHA, and what a great job he did. Over the years, the auction has been a big hit and a high point of the year. We have been fortunate to have several really great auctioneers to entertain us in past. For many years Dan Anderson, (SK), did the honors. There are always laughs all around as the auctioneer/master-of-ceremonies tries to describe the virtues and inner workings of some mysterious device or mechanism which absolutely no one except the donor recognizes. Don's lively ad libs kept the exchanges and extemporaneous comments rolling. All the bidders had a great time trying to out bid each other, some were more successful than others but I believe that everyone was happy. Besides, who know what exchanges took place in the parking lot after the meeting? I forget who finally ended up with the classic Swan 350 but that tuning dial with its two-speed gear had a solid feel that was well worth having. I got to spin the dial a few times. Nice. Another great rig picked up was a sharp looking National NC-125 receiver. It has been many years since I last saw one of those. Among the bidders were Cody Adams, KG6YPK and Diane Cowan, KI6IFS. Diane was all outfitted with bicycle riding togs and her helmet. I'm sure she didn't win the bid on the National NC-125, as balancing it on her bike on the way home would have been a challenge.

We had our annual election of officers and I

was once again reminded that in the early 1980s, we voted and wrote the names and offices of those elected on the blackboard. Someone erased the blackboard when we vacated the room and nobody remembered to jot the names and positions down. There was a bit of collective reconstruction for the secretary after that shocking error was discovered. I believe that Susan Tracy was the President at the time.

Was having dinner the other night and met a woman living near Redding. She was in Santa Cruz, visiting her mother, a friend of mine. She mentioned that she owned a 40 acre ranch. Her neighbors were from Santa Cruz, and did I know them? Jim Livingston and XYL Cory, friends of mine and Lee, KC6BML, and Rich Hanset, KI6EH. The Livingstons live on an adjacent 80 acre ranch and raise grapes. Another one for the small world department! Jim gave a few technical lectures for my ham radio classes at Cabrillo College in the mid 80s.

KGO Radio goes Green

San Francisco station KGO AM says that it has gone partially green. According to its website, on October 30th KGO became the first major commercial broadcast media outlet in California to reach its listeners by harnessing the power of the sun to reduce its dependence on the regions power system.

The KGO solar energy program began last winter. The now completed solar panel installation is located at the stations transmitter site near San Francisco's Dumbarton Bridge. Not only does it reduce KGO's daily load on the power grid, but it will serve as an ongoing test facility for emerging solar technology. You can see the construction of the solar power system as it progressed from 2008 to now <http://dynamic.kgoradio.com/solar.php>. —from Amateur Radio Newsline

Rescue Radio

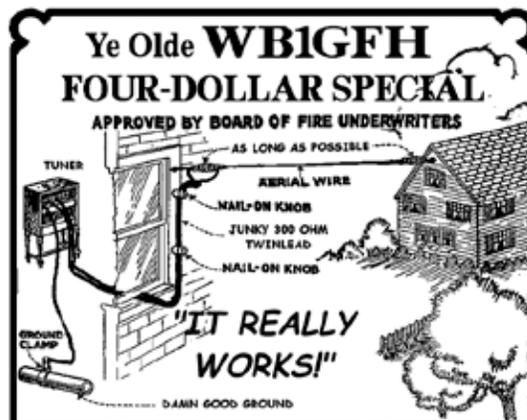
Global Security Systems and Northrop Grumman say that they are working together to offer an integrated emergency alert system. One that they hope will be deployed all across the United States by homeland security officials. According to a news release the system is designed to cover any emergency situation at any level. It says that in the event of a war, natural disaster, national, regional or local emergency the combined systems will allow the president, state and local officials, critical infrastructure and emergency management agencies to seamlessly and immediately communicate with first responders as well as citizens. This using any and all forms of personal communications devices such as cellular phones, wireless Personal Digital Assistants and permanently installed two-way enabled entertainment systems.

Northrop Grumman will build a national, state and local alert and warning system that uses wireless communications infrastructure and consumer devices. Global Security Systems will contribute expertise in local collection and delivery of emergency messages and its experience in deploying its Alert FM system.

The two companies believe they can offer an all encompassing national alerting framework that spans agencies and levels of government at all levels while benefiting from an installed base at emergency operations centers. They also contend that this system will provide an access point to involve mobile service providers and device integration labs.

According to the announcement, the Alert FM technology allows warnings to be sent to geographically specific areas and the control processor chip can be designed into common devices such as cell phones, pagers and even smoke detectors. It will be interesting to see if any ham radio manufacturer decides to integrate Alert FM into the next generation of ham radio gear or if they will be licensed by the technology's patent holder to do so.

—from the Amateur Radio Newsline,



SCCARC Board - 2007

President	Rich Olsen	WIWUH	464-7474
Vice President	Don Taylor	K6GHA	k6gha@k6bj.org
Secretary	Kathleen McQuilling	KI6AIE	476-6303
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	Mike Doern	KM6IKE	477-1161
	Bruce Hawkins	AC6DN	
	Ron Skelton	W6WO	477-1021
K6BJ Trustee	Allen Fugelseth	WB6RWU	475-8846

MONTEREY BAY REPEATER ACTIVITY

Santa Cruz County ARC	K6BJ 146.790- PL 94.8 Santa Cruz KI6EH 147.945- PL 94.8 Watsonville K6BJ 440.925+ PL 123.0 Santa Cruz
	• SCCARC Net Monday 7:30 PM 146.79- /147.180+ /440.925+ linked • SCCARC 10 Meter Net 28.308 MHz USB Monday 7:00 PM
San Lorenzo Valley ARC	WR6AOK 147.120+ PL 94.8 Ben Lomond
	• SLVARC Net Thursday 7:30 PM
Loma Prieta RC	WR6ABD 146.640-(PL 162.2)
	• LPRC Net Tuesday 8:00 PM
Naval Postgraduate School ARC	K6LY 146.97- PL 94.8 / 444.700+ PL 123 (Linked) Monterey
	• NPSARC Net Wednesday at 8 PM on K6LY/R • Monterey ARES Net Wednesday 7:30 PM K6LY 146.970- (PL 94.9)
ARES Nets	SC County Wide ARES Tuesday 7:15 PM on AB6VS 440.550- W6WLS 147.180+ AE6KE 146.835-(Linked repeaters / PL 94.8)
Followed directly by	• SLV ARES W6JWS 146.745-(PL 94.8) & WR6AOK 147.120+(PL 94.8) on alternate Tuesdays • South County ARES K6RMW 147.00+ (PL 94.8) • LPrieta ARES AE6KE 146.835- / AB6VS 440.550+ (Linked /PL 94.8) • Santa Cruz ARES K6BJ 146.79- / (PL 94.8)
	• Newsline (Ham News) Broadcast Wednesday at end of NPSARC Net • 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

SCCARC Meeting	Friday	Jan 16
Board Meeting	Wednesday	Jan 28
Short Skip Deadline	Monday	Feb 9
SCCARC Meeting	Friday	Feb 20

MONTHLY MEETINGS.

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

NET CONTROL SCHEDULE

(Subject to Change)

12/22	Diane KI6IFS
12/29	Cody KG6GPK
1/5	Phil KE6UWH
1/12	Tom K6TG
1/19	Chris KG6DOZ

SHORT SKIP

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Free to members.

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