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**Dummy Load
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 SJCARS**

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Next Monthly Meeting: Friday, September 11, 2009, 11:30 A.M.
 San Juan Island, Friday Harbor Fire Station, 2nd Floor.

**Peter, K2SPR
 Our Long - Time EC
 Steps Down**

*Please join me in thanking Peter for his
 years of service to the club.*

OMs & YLs -

I think it is time for me to bow out of my formal roles in SJCARS. I've been your EC for a little over three years now and a lot has happened during that time. I think the club has made huge steps to improve our ability to support the San Juan County first - responder community. We've participated in more drills, some of them quite realistic, than ever before. We've completed and deployed the emergency communications stations which DEM has funded. We've made good progress in getting a cadre of white box operators up to speed. We've met with our counterparts in the other counties in ARES District One. We've set up, thanks to the generosity of Frank Beatty and the hard work of other members, a satellite receiver station on Cady Mountain. We've begun to get participation on a new band, 220 MHz. I take no credit for what the club members have done. Our growth in numbers and ability is entirely due to hard work and not inconsiderable smarts of our members.

I think it is time for someone with a new perspective and new ideas to take over and help the club continue down the path it has so successfully followed.

I want to thank all of you for your forbearance when I've brought idiot ideas from the mainland before you, and to

thank you for the great ideas you've generated here in the sticks.

I've also been Trustee for your club station call signs (all six of them) ever since the first club call was issued in 2004. I'd like to hand that role off to someone else, too. It's not burdensome, but the Trustee needs to be someone more integrated into the activities of the club than I can be.

These resignations will be effective at the end of September. I'm publishing this information now so that there can be some consideration of who will carry on these roles prior to the September club meeting, where replacements will have to be identified.

There is a District One EC Meeting in Mount Vernon on September 19th, about a week after our club meeting. I hope I can introduce our new EC candidate to that group at that meeting.

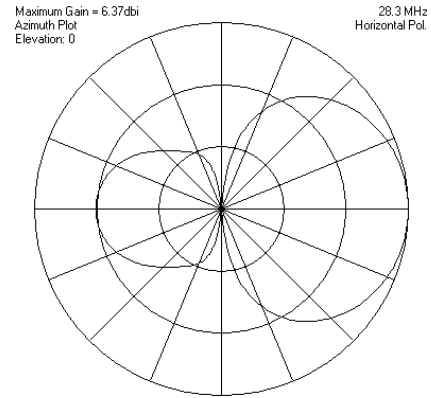
See you at the club meeting.

*- 73 -
 Peter, K2SPR*



A Field Day Beam, Part I

By Ed K., KD7TUN

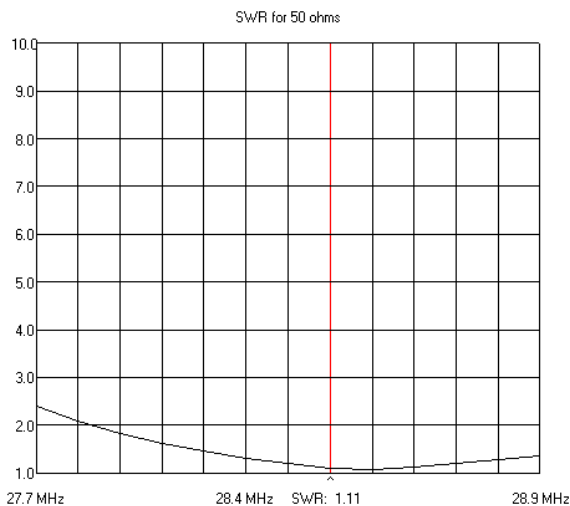


Polar plot in free space: Gain 6.37dbi, FB ratio about 10db. This is typical performance for a 2-element Yagi.

As many of you know, I whipped up a 10M/6M beam for field day. Since it seemed to provoke a few questions, (the most common one being, "Which way is it pointing?") Bryan has asked me go into a few details of its design. Next month, I'll bore you with the construction details.

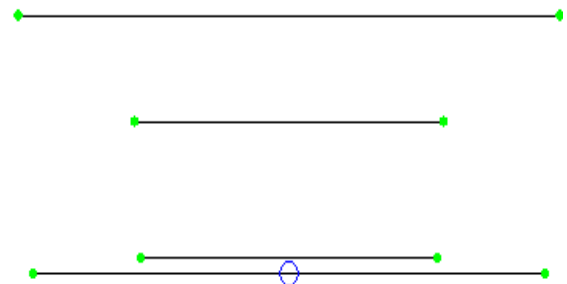
What I wanted was an antenna that would let Technician licensees work some DX, and operate without a higher rated control operator present. So, the SSB parts of 6M and 10M seemed like the best choice. Since DX on those bands is usually done with horizontal polarization, a simple portable Yagi looked like a good idea. To keep the whole thing manageable and easy to mount, I decided on just two elements for each band, a reflector and a driven element. Although a driver/director two element Yagi can have slightly more gain and very impressive front-to-back ratios, the penalties are narrow operating bandwidth and a low impedance requiring matching of some kind. A driver/reflector Yagi can be designed with a direct 50 ohm impedance, respectable gain and front-to-back ratio, and fairly wide bandwidth. There are two reasons to favor a wide bandwidth. The obvious one is that a tuner may not be required, but if one is used, the effective useful bandwidth may be even further increased. The second reason is that a wide bandwidth design is usually more forgiving of errors in construction.

So, I pulled a 2M design out of my many antenna models, scaled it to 10M, adjusted it a little for the 3/8" tubing diameter I intended to use, and got the following results:



SWR in free space - 28.4MHz is the center of the Tech SSB part of 10M.

A similar design for 6M should be fine, but the question was how to incorporate it into the same structure and only have one feedline. I decided to try coupling the 6M driver to the 10M driver parasitically. There is an ugly little equation in the ARRL Antenna Book that gives the distance between two dipoles for the parasitic one to create a specific impedance in the driven one. It's a good place to start, after which playing with the spacing in a modeling program will get things just right. To keep the boom short, I put the 6M driver behind the 10M driver, and the 6M reflector between the 6M driver and the 10M reflector. The whole mess looks like:



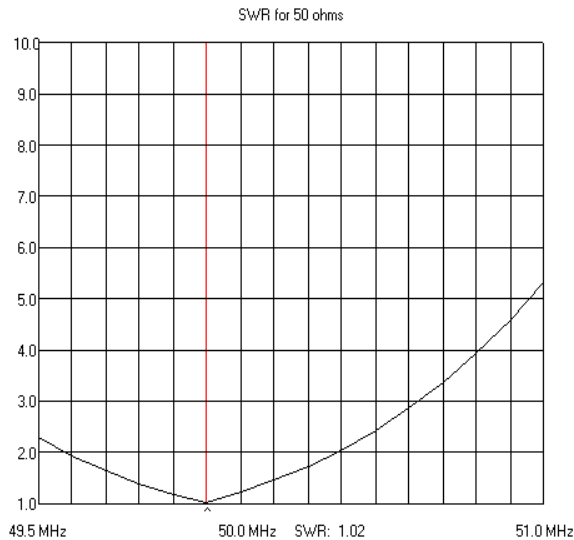
The elements from top to bottom are: 10M reflector, 6M reflector, 6M driver, 10M driver. The feedpoint is the blue circle on the 10M driver. In this view, the direction of maximum gain is towards the bottom of the page. The dimensions are:

Element	Length	Distance from 10M driver
10M reflector	204.4"	77.4"
6M reflector	116.4"	45.6"
6M driver	112.0"	4.5"
10M driver	193.0"	0.0"

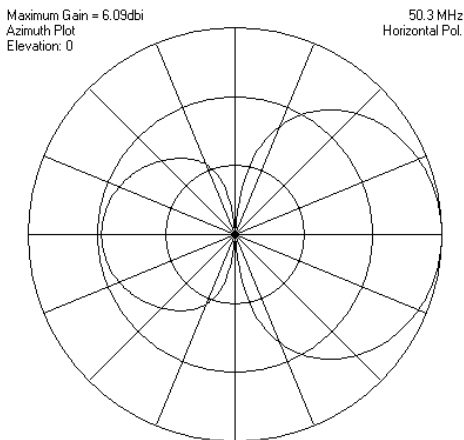
Adventure Race 2009

By Bryan H, KG6GEU

Of course, a concern might be how the elements from one band interact with the other. Fortunately, it turns out that there is very little interaction. The 10M SWR and gain are essentially the same with or without the added 6M elements. The 6M performance is:



The frequency is a little low, but the tuner we planned to use will easily deal with it. The narrower bandwidth is typical of parasitically coupled drivers.



Once built, the actual antenna had a nice low SWR at the predicted frequencies, and it worked well enough to make contacts with BC, S. Calif, and Arizona.

Next month: how I built it using stuff available on the island.

Those of you who were at the July meeting will remember a visit from Jane Hutchison describing the planned 24 Hour Adventure Race September 18th and asking us if and how we could support them.

I spent some time looking at the logisites of a race by foot, bicycle and kayak across several islands over a 24 hour period. I came to the conclusion that the best thing for their participants was for each team of 2-4 people to be equipped with a Marine VHF Radio as the kayak portion of the race was the most difficult to cover and they already have the Fire Boat standing by.

To assist the participants, I will be giving a short course in Marine VHF operation and check-in procedures before the beginning of the race. Any boaters who would like to help out should contact Jane at:

jhutchison@rockisland.com

for more information about the race see:

<http://www.sanjuanislandquest.com/>

I would also like volunteers for the 6 Hour adventure race which coincides with the end of the 24 hour race. Due to the location on the north end of San Juan Island I'll be setting up a portable net control from Young or Mitchell Hill. This should be a great chance to get involved with communications support for a new and growing island event.

Barbara Nason's "Now Famous" Artichoke Dip — A Potluck Hit!

- 1 8-1/2 oz can UNmarinated artichoke hearts-drained and coarsely chopped.
- 1 7 oz can of diced green chilis
- 1 cup freshly grated Parmesan cheese
- 1/2 cup mayonnaise
- 1/2 cup sour cream

**Mix together. Heat for 10-15 minutes in 375° oven. (or longer at 350°).
Serve with tortilla chips.**



ILLW 2009

By Bryan H, KG6GEU

We got started at 8:00am just as Lime Kiln Park opened for the 2009 International Lighthouse and Lightship Weekend (ILLW). Ed, KD7TUN and I assembled the station using an ICOM 706 with tuner and K9MRQ's Cushcraft Multiband Vertical which Ed had refurbished since its unsuccessful deployment at Field Day.

Mike Sear, N7TLL, was on hand to help the new operators get into the groove.

“CQ -CQ -CQ This is Special Event Station N7JN Lighthouse.” was repeated many times.

We worked 20 meters through the morning and compiled 23 contacts from the Big Island on Hawaii to as far east as Nebraska and Minnesota. Frank, KD7IRE logged the bulk of the contacts with 10, while Charlie, W7BXH contributed a CW contact from Anchorage AK.

In all it was a beautiful day at a beautiful place with 15 club members stopping by. Only a visit from the whales would have made it better.

(See Pictures, following page)

OPERATOR	TIME	CALL	NAME	R ST	QTH
N7TLL	8:50 AM	W6A	BILL	59	US0031
N7TLL	8:55 AM	N0AIE	EVERETT	56	WYNOT, NE
N7TLL	9:00 AM	VA7GO	GRANT	59	US005/032/160/176/426
N7TLL	9:35 AM	AH6V	JERRY	56	BIG ISLAND, HI
KD7TUN	9:40 AM	VE7DCA	RALPH	59	VICTORIA, BC
KD7TUN	9:42 AM	KE5BKU	SANDRA	57	ALBUQUERQUE, NM
KD7TUN	9:51 AM	KD6CRL	JOHN	59	TUCSON, AZ
KD7TUN	10:03 AM	WBOGGM	JOHN	55	MONTGOMERY, MN
KD7TUN	10:11 AM	K2HSV	DAVID	59	BOONVILLE, CA
KD7TUN	10:14 AM	K6PZB	JOHN	57	GRATON, CA
KD7IRE	10:20 AM	K5ZGY	FARRELL	55	SANTA FE, NM
KD7IRE	10:21 AM	N6KN	ROCCO	58	PALOS VERDES, CA
KD7IRE	10:25 AM	K6DY	TONY	53	PHELAN, CA
KD7IRE	10:35 AM	KA6PGN	MICHAEL	55	EUREKA, CA
KD7IRE	10:40 AM	W0YJT	JOHN	58	TOPEKA, KS
KD7IRE	10:50 AM	AF6NE	KEITH	33	29 PALMS, CA
KD7IRE	10:57 AM	WA0SSN	DON	42	FARIBAULT, MN
KD7IRE	11:00 AM	WB0NAI	LOU	55	PT ANGELES, WA
KD7IRE	11:10 AM	KB0PWP	TRAVIS	59	PT ANGELES, WA
KG6GEU	11:36 AM	KC7C	KITSAP ARC	59	US0061
KD7IRE	11:47 AM	KG6AXA	BILLY	59	LANDERS, CA
W7BXH/CW	12:20 PM	KL7AI	MIKE	59	ANCHORAGE, AK
KD7TUN	1:37 AM	KG6GTI	LARRY	44	NEWPORT COAST, CA



International LighthouseWeekend

LimeKiln Light-house

Erin Corra, Limekiln Point State Park Interpretive Specialist



Ed, Frank & Mike standing by for your call, Lighthouse US0080



Bryan and Ed set up antenna as Mike supervises



Charlie contacts Alaska on CW

2009 8.8K Race

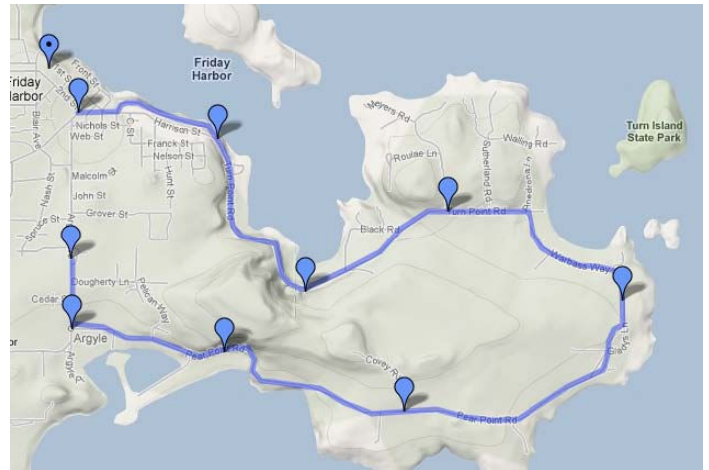
By Bryan H, KG6GEU

It was my first time as Net Control for an event, and we had to replace the battery for the White Box at the Sheriff's Office before race start, so I was a little nervous.

Nevertheless the race went off without a hitch. We worked the event simplex and with only 7 people to cover 10 locations we had to do a couple of forward rotations, which the group handled without incident.

LOCATION TACTICAL OPERATOR CALLSIGN

<u>LOCATION</u>	<u>TACTICAL</u>	<u>OPERATOR</u>	<u>CALLSIGN</u>
SHERIFF OFFICE	NET CONTROL	Bryan Hoyer, KG6GEU	
FH DRUG	START	Wayne Rankin, WA6MPG	
HARRISON	HARRISON	Ed Kelm, KD7TUN	
SHIPYARD COVE	SHIPYARD	Dani Hoyer, KE7TLE	
CARTER BEACH	CARTER	Stu/Martha Salot, W7UW/N7ZCZ	
PEAR PT PARK	PARK	Frank Beatty, KD7IRE	
COVEY RD	COVEY	Clare Kelm, KE7WQY	
GRAVEL PIT	GRAVEL PIT	Ed Kelm, KD7TUN	
ARGYLE	ARGYLE	Dani Hoyer, KE7TLE	
FAIRGROUNDS	FINISH	Wayne Rankin, WA6MPG	



Island Rec Gives Shining Star Award

SJCARS Has received the Shining star Volunteer award for their years of communication service at the 8.8K run.

All SJCARS members friends and family are invited to an Ice Cream Social:

Saturday Sept 12th

3-4 PM

Family Park at the Fairgrounds

SJCARS 2009 Annual Potluck

By Dani H, KE7TLE

*****FRESH CRAB! GREAT GUITAR!
FANTASTIC ARTICHOKE DIP! ...and of
course, good friends getting together to share a
common interest...*****

If I had a huge neon sign, this would be the headline for the 2009 SJCARS Summer Potluck review. It was held August 8th at Odlin Park, Lopez Island. Hosted by our fellow HAM 'ers from Lopez, Jerry had table coverings and hot coffee already in place when we arrived off the ferry. He also generously provided commuter services to ferry walk-ons.

The potluck presented the normal array of 'wonderful' dishes and desserts, highlighted this year by Mike Speece's addition of fresh crab on ice, ready to crack and eat! Mike further swooned the audience with a serenade on his guitar with his strumming & songs we all recognized.

The club did a 'round robin' of introduction, always nice to add a face to the voices we hear on the air-waves. Dani showed the club the plaque she carved to be presented to Frank at the September meeting. It will stand guard on the airwaves at Frank's radio shack that Bryan, Ed and Frank built on Cady Mtn. and in which Frank has so generously allowed us to place a "repeater" for club use. The 8.8k run to support the Fair was organized and Em-Com persons were signed up.

Guest of honor was John Acton, K7ACT, the WWA District 1 Emergency Coordinator. John is from Whidbey Island and is fairly new in the position as EC so he is getting acquainted with the different groups in his district. Thanks for coming, John, and Peter for inviting him!

As always, the ferry schedule broke up the party well before we were ready to leave, but a fun and social time was had by all. A special Thanks to Jerry and our Lopezian friends for making the morning more expeditious and enjoyable with their preparations and support.

Monthly ARES Report San Juan County

"The Amateur Radio Emergency Service (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization, is eligible for membership in the ARES. The only qualification, other than possession of an Amateur Radio license, is a sincere desire to serve."

There are four levels of ARES organization--national, section, district and local. The local ARES operation will usually take the form of nets--HF nets, VHF (repeater) nets, CW nets, even RTTY, packet or other special-mode nets, depending on needs and resources available. Operation during an emergency net is a little different from operation in any other net; it requires preparation and training. The function of our weekly net, as well as working public events such as marathons and runs, better prepares us for an emergency situation here within our island communities for which we can offer our services to the community, the district and the state.

Every month we file a report with WWA district to report the ARES activities around San Juan County. The summary of that report will now be published in the DummyLoad monthly to further raise its visibility to all members of the club and community.

If you are a HAM and would like to join the ARES group here in San Juan Island, the registration form can be downloaded from:

www.arrl.org/FandES/field/forms/fsd98.pdf
and returned to KE7TLE@arrl.net.

ARES Report District 1 SJ Co August 2009

ARES Members	22		
ARES Nets Active	4		
Drills, Tests & Training	15	Person Hrs	66
Public Service Events	1	Person Hrs	32
Emergency Operations	1	Person Hrs	2
Team Miles Driven	240		

WHAT IS A PUXING ?

By Mike Sears, N7TLL

It is the latest 2 meter VHF, 5 watt Handie-Talkie being used in the San Juan Islands by a number of SJCARS members. To my knowledge the first unit to arrive in SJC was demonstrated by Peter, K2SPR at one of our Spring club meetings. I was hooked and had to order one. Not having ever owned or used an HT I didn't know what to expect good or bad. So off to the internet I went, found a website located in Hong Kong and placed my order for a PUXING, PX-777PLUS for the grand total of \$69 including delivery. I was required to use my PayPal account and that was OK with me because I wasn't about to send my Visa card number to Hong Kong. In (7) seven days my very own PUXING arrived via the Hong Kong Post, registered Air Mail which was tracked by the US Postal Service. So far so good and I was like a kid opening a birthday present with great anticipation. The box contained the radio, antenna, battery, rapid charger and optional earphone. I studied each component and the user's manual which was a bit cryptic but discovered enough to move on. I charged the lithium-ion battery, installed the antenna and turned it on. I dialed in 146.900 MHz, set the - 600 KHz offset and 131.8 tone then pushed the PTT button. I called K2SPR and needless to say, Peter the sentinel of the N7JN repeater answered my call. Phase 1 was now complete, I purchased a radio from half way around, made it work and completed a contact with the very person who started the PUXING revolution.

Phase 2 is now beginning, which is learning how to use all the features and program this marvel of electronic packaging. Peter and Basil, KE7KRO have been kind enough to supply me with after market instructions on how to interpret and/or clarify the user's manual supplied by the manufacturer. Please note that I purchase the PX-777PLUS which includes the Automatic Numbering Identification (ANI) code and Scrambler features which I will probably never use, but thought I needed for an additional \$4. The standard model PX-777 for \$65 would have been just fine for normal use. I guess the Scrambler mode would be great if I had sensitive or secret stuff to communicate, but now I have the feature just in case, Hi Hi. I did order the optional 5-013-145 VHF telescopic antenna which has some gain over

the standard rubber duck antenna that come with the radio. It does appear to help when I am in a marginal location.

As you can tell this is not a complete product review, but simply my experience to date with the PUXING HT. If you would like to review the specification, options available and price lists, go to www.409shop.com. If you have any question or need help navigating the website please call me at (360) 378 9742.



TIME FOR A FIELD TRIP

From the Editor

How about an unforgettable field trip? Summer is rolling by, and the good weather is here. Shouldn't we take advantage of it by rolling up to Bellingham and enjoying the American Museum of Radio and Electricity?

If you haven't seen this exciting and unique museum, you are in for a treat. This is a world-class collection of electrical parts, gadgets, instruments, inventions and historical artifacts that will delight you with old memories and new questions. Every inch of two enormous spaces has been filled with exhibits, tubes, juke boxes, furniture, ancient television and movie hybrids, hands-on experiments and entire rooms from the past. And most amazingly, everything works! You can even play a Theramin.

Don't know what that is? It's the device that creates the weird music in science fiction or horror movies. Sort of like a musical saw, only more subtle. You'll recognize it immediately. It was once considered a serious musical instrument, and concerts were given by virtuoso players.

Let's choose a Saturday in October: how about the 17th or 24th? Call or e-mail me, soon!

