The Heterodyne

Newsletter of the West Valley Amateur Radio Association

WVARA Summer BBQ & NAQP Saturday August 20 11am - 2pm

At Sunnyvale's Baylands Park
Pickleweed Place
Reservation is under "WVARA"

When you get to Baylands Park, turn *right* after going through the main gate

Please see pages 2 and 3 for more BBQ information

WVARA Repeaters (W6PIY)						
Band	Frequency	PL				
6 Meters	52.580- MHz	151.4 Hz				
2 Meters	147.39+ MHz	151.4 Hz				
1.25 Meters	223.96- MHz	156.7 Hz				
0.70 Meter	441.35+ MHz	88.5 Hz				
0.23 Meter	1286.2- MHz	100 Hz				

Club Net

WVARA's club net is on the W6PIY repeaters each Tuesday at 8:30 pm. All repeaters are linked together during the net. The net script can be found at www.wvara.org/net.html.

Visitors Are Welcome!

President's Letter

NSS Special Event Station

The task of honchoing a special event station was dropped in my lap at the last minute in July. The National Speleological Society (NSS) wanted the station for their 75th anniversary convention, and there was a plan for that station, but at the last minute the plan fell through. The convention chair called me and asked if I could throw something together in the two weeks before the convention.



I emailed a couple of hams who had run stations at previous conventions and Sam Rowe, KG9NG was able to help. We hatched out the barest sketch of a plan, we each loaded up a bunch of radio equipment we thought might be useful, and headed for the convention in Ely, Nevada. I arrived late Friday afternoon, and Sam arrived Saturday morning.

We were greeted by a radio tent almost large enough to hold the entire WVARA field day operation and a golf course fairway for antennas. The convention staff had told us that we had no trees, and power would only be available when the generators were running for the main stage and dining tent, so we had planned accordingly. What we didn't plan for was the 30-40

MPH winds every afternoon that forced us to open the walls of the tent to keep it from blowing down, and the dust that covered everything.

Sam brought several portable HF antennas, several batteries and chargers, a generator, and an MFJ box that made his Icom 706 into a portable emergency radio. I had my K3 setup, an end fed 40 meter antenna, and a 2 element wire beam for 20 meters. I brought two photographic light stands for antenna supports. As it turned out, Sam's generator made so much RF noise that we had to go QRT while we charged the batteries.

We got the station setup by early Saturday afternoon with several of antennas to chose from. Of course as soon as things were setup, we started calling CQ.

We ended up using the K3 and the wire beam on 20 meters for most of the contacts. We both liked the digital voice recorder for CQing. The initial pileup was a lot of fun. I had brought my headset and a new footswitch for PTT, so I was hunched over the logging computer handling QSOs left and right. For about half an hour I was making about two fairly conversational QSOs a minute. The experience operating in the California QSO Party was very useful.

One highlight was a young girl enjoying her first time operating the radio. Her pileup technique was excellent -- she had a good elmer. It is always nice to see new people coming into the hobby.

The NSS special event stations tend to shutdown after Sunday as all the operators want to go to convention sessions. We ended up with 100 QSOs and 98 unique stations located as far away as Quebec and Rhode Island. Not bad for a last minute operation and an antenna only 11 feet above ground. Sam and I are already planning next year's operation in New Mexico.

73 Bill AE6JV

Annual WVARA Summer BBQ & NAQP

When: 11am - 2pm, Saturday, Aug 20

Where: Sunnyvale's Baylands Park, Pickleweed Place

Note: When you get to Baylands Park, turn right after going through the main gate.

There won't be an evening WVARA meeting in August. Instead, we are having our annual WVARA BBQ. I'm totally stoked! Our location (see map below, the reservation is under "WVARA") includes multiple tables, grill, an AC outlet, and a covered awning for shade. There is an entry fee per car at Baylands Park, so you may prefer to carpool. We'll have hot charcoal and condiments -- please bring your own meat to grill.

Let me know what you're planning to bring. We need volunteers to be in charge of the following:

- 1) Setting up the grill (bringing, setting-up and lighting the charcoal)
- 2) Condiments, paper plates and plastic ware
- 3) a couple liter bottles of soda
- 4) baked beans
- 5) a green salad or potato salad
- 6) Buns for hamburgers and hot dogs
- 7) fruit (watermelon or whatever)
- 8) dessert items (cookies or equivalent)

Our BBQ coincides with the SSB portion of the North American QSO Party (NAQP) which

means this is an ideal opportunity for a really fun portable radio operation. (NAQP Contest rules are at: http://www.ncjweb.com/NAQP-Rules.pdf). We can't put up any big Field Day-style antennas at Baylands, but we can still string up an NVIS dipole and/or put an HF whip on top of the metal awning and have some fun in the contest. Let me know if you are interested in volunteering to be in charge of either of the following two tasks:

- 1) Setting up an HF SSB station
- 2) Setting up a VHF station for event coordination through the WVARA repeater
- Jim, K6EI

k6ei at earthlink.net



Photos of 2015 BBQ by Jim K6EI and Phil W6PK









WVARA Field Day 2016

This was WVARA's eleventh year operating Field Day from Mora Hill in Los Altos, California, overlooking the Silicon Valley from an elevation of 500 feet. This year we operated QRP in the 12A Battery category. We had a Get-On-The-Air (GOTA) station, three HF CW stations, three HF SSB stations, an HF digital station, , and six VHF/UHF stations including one with satellite link capabilities. In spite of being limited to 5 watts, we succeeded in contacting all 50 states and a bit of DX. And there was plenty of VHF activity to keep us busy on the 6-, 2- and 70 cm bands including two satellite QSOs. We managed to make over 2000 contacts in 24 hours – not bad for 5 watts! Our GOTA station (W6ZZZ) was particularly popular with plenty of drop-in visitors including a good number of kids.

Being outdoors also meant that we got to put up wild-n-crazy antennas that our spouses and neighbors might never allow back home. Antennas on Mora Hill this year included 4-element monobanders on 15- and 20 meters as well as a Shorty-Forty 2-element Yagi. We likewise used a pair of HF

tribanders on 10- 15- and 20 meters. (Actually, we adapted one of the tribanders to also cover 40 meters, which definitely came in handy with the declining sunspots.)

With the decline in the sunspot cycle, band conditions were less than stellar – especially when compared to what we've seen the previous few years. According to the ARRL's propagation bulletin, the average sunspot count during the week of Field Day this year was zero. Argh! The solar flux near the start of the weekend was around 75 – a big drop from last year's solar flux of roughly 100. And to make matters worse, geomagnetic field activity spiked from quiet to major storm levels on June 25, with the estimated planetary A-index hitting 33 and the K-index reaching 6, thanks to a coronal mass ejection. No surprise -- 15 meters this year was a disappointment with a 70% drop in the number of completed contacts.

The good news was that conditions really rocked on the lower bands. Twenty- and 40-meters kept us busy, and we likewise had a 27 percent jump in the number of 80 meter QSOs this year. But the biggest jump in band performance was on 2 meters, where we went from 37 contacts in 2015 to 65 this year. Wow!

In addition to having a great time, each year we work at improving our equipment, antennas and operating skills. In order to minimize interference within our site, we took care to have HF transceivers with well-designed front-ends in order to minimize spur transmissions and receiver pumping/desensing. All of our site's HF stations used Elecraft K3 or KX3 transceivers. We likewise set up most of our antennas in a line pointed at the East Coast, so the side lobe rejection helped reduce interference.

Be sure to let us know if you'd be interested in getting involved with our team in 2017. We tend to be especially short-handed between midnight and 7am. If you have any questions, you can reach us via CQFieldDay@gmail.com or view our Field Day plans at www.wvara.org.

- Jim, K6EIWVARA Field Day Coordinator

Field Day Photos by Kevin KK6VF and Bill AE6JV





































Field Day Summary:

2016	CW QSOs	Digital	Phone	GOTA / SSB
80	155	9	98	
40	416	22	177	23
20	551	102	137	
15	71	22	79	3
10			3	
6	2		14	
2	1		42	
220 MHz			10	
440 MHz	1		18	
900 MHz			1	
1.2 GHz			1	
Total QSO	s 1197	155	580	26

Total QS	<u> </u>	197		133		200		20	
2015	CW QSOs	Phone	QSOs	Digital (QSOs	GOTA CV	٧	GOTA SSB	
80	114		92						
40	266		131		90	:	33	9	
20	524		184		76		23	55	
15	355		161		35	4	43	3	
10	2		22						
6m	2		27						
2m	1		36						
1.25			8						
Total QSOs	1264		661		201		99	67	
2014	CW QS	Os I	Phone	QSOs	Digi	tal QSOs	(GOTA SSB	
8	30	83		25				12	
4	10	401	50			52		42	
2	20	530	14			79		1	
1	15	382		170		55		3	
1	LO	1				1	L		
	6			27					
	2			23					
450MH	-lz			9					
Total QSO		L397		449		187		58	

New Member

The following new member joined WVARA since the last meeting:

Kevin Reid, AG6YO

Welcome!!!

Electronics Flea Market
Saturday, September 10
www.electronicsfleamarket.com

For Sale

Hi everyone,

A ham in Los Gatos has retired out of state and his son needs to find a home for some remaining equipment. Chief among these are 4 Wilcox 96D transmitters. I ran a pair of these back in the '70's when I was in Miami so I know a little about them. I believe they were used for HF communications by airlines. There would be a row of these, each set to a specific frequency all hooked to a common power supply and modulator. An operator in an adjacent (and quieter) building would dial a rotary phone to select a certain frequency.

Each transmitter has an 813 exciter that drives a pair of 450TL's. One of these has vacuum variables in the grid circuit - which I've never seen before - the other two are air variables. All have vacuum variables in plate circuit (only the D's had these).

The output circuits were originally inductive coupled output, but these are easily changed to a Pi-L which is what I did. In my case I took out the 813 exciter and put a bias supply in it's place and grid drove it with 100 watts with a loop in the input coil you see in the pictures. Original B+ was 4200 - I ran mine with 3500 at first and 5000 later - using it as a linear amp for SSB and RTTY.

They have very nice digital counter controls and a little window you can view finals through.

One unit was out of operation and used as a spare. There is a huge Westinghouse power supply with more rectifiers than I've ever seen.

And there is a tower and a home brew 4-1000A RF deck. His S-Line and other equipment were sold some time ago.

If anyone has an interest in these or knows someone who does please let me know. These are wonderful transmitters but require a certain mind-set and above all the room for them. Please forward to anyone you think might be interested.

73 to all, Sid, K6AF

For photos and Sid's contact information, email Phil, W6PK, at his QRZ email address.

		W	VARA	Net Ch	neck-Ir	ıs (W6	PIY)				
Tuesdays at 8:30 PM											
Call Sign	Name	6/7/16	6/14	6/21	6/28	7/5	7/12	7/19	7/26	8/2	8/9/16
Total		13	17	12	15	9	11	17	17	18	13
AA6RB	Roy	Х	Х		Х		Х		Х	Х	Х
AB6XS	Kevin		Х			Х	Х			Х	
AE6JV	Bill	Х	Х		Х	Х				Х	
AF6AE	Bill	Х	Х	Х				Х	Х	Х	Х
AG6YO	Kevin				Х	Х			Х	Х	Х
Al6FN	Jin				Х			Х			
K6BIB	Bodan	Х		Х				Х	Х		
K6BRF	Bert	Х			Х			Х	Х	Х	
K6QFO	Mike						Х				Х
K6SCC	Brian							Х	Х		Х
K7RJV	Rex		Х	Х			Х	Х			
KF6EMB	Svend	Х		Х	Х	Х		Х	Х	Х	Х
KI6SLX	Peri	Х	Х		Х	Х				Х	
KJ6CQJ	Dean		Х		Х						
KJ6GMO	Sue		Х		Х						
KK6VF	Kevin	NET	NET	NET	NET	NET	NET	NET	NET	NET	
KK6WRP	James	Х					Х		Х		
KM6ABF	Scott			Х							
KM6AMQ	Matt		Х	Х			Х	Х	Х	Х	Х
KM6CLI	Greg	Х	Х	Х	Х						
KM6DAC	Cameron							Х	Х		Х
KM6DOS	Shannon								Х		
KS6PD	Steve							Х	Х	Х	Х
KX6B	Dick		Х								
N9CU	Andy							Х	Х	Х	
NT6S	Tom									Х	Х
NU6P	John									Х	
W6ESL	Tom		Х	Х	Х	Х	Х	Х		Х	Х
W6IA	Mark	Х	Х		Х	Х	Х	Х	Х		Х
W6PK	Phil		Х	Х							
W9KKN	Bill	Х	Х	Х	Х		Х	Х	Х	Х	
WA6FTP	Gary							Х			
WB6KHP	Dave	Х	Х	Х	Х	Х	Х	Х	Х	Х	NET
WR3K	Greg									Х	

Treasurer's Report

These financial reports cover our activities through July 30. I'm currently taking care of family business in NH. The July Bank statement had not arrived when I departed, so July information is preliminary. I expect to have a complete report through August in the Sept. Heterodyne. July was a slow month. The only activity was related to the June Flea Market. Thus far August has been similarly slow.

-- Flea Market: The detailed Flea Market report shows that we netted 1,256.59, marginally more than the budgeted \$1100. This is a rather thin gain for the amount of work involved. Clearly we need this income, however we need to explore ways to increase the margin. More advertising and promotion may be in order. The largest expense is ASVARO's participation fee, which has climbed almost 40% in the last 4 years, (2013 \$1650, 2014 \$1950, 2015 \$2200, 2015 \$2300), primarily due to security costs. At some point, we may want to ask ourselves if the small gain is worth the effort, and look for an alternate source of income.

My thanks to Greg DeBrisay, N6GD, for organizing this year's stint at the flea market.

See everyone at The Bar-B-Que 8/20.

Peri Frantz, KI6SLX, WVARA Treasurer

WVARA
Flea Market Detail
January through July 2016

Туре	Date	Num	Name	Memo	Amount
Income				-	
4100 -	- Program Inc	come			
4150	— Flea Marke	et Reciepts			
Deposit	06/11/16	2	WVARA	Concession Sales; (Peri Frantz)	464.57
Deposit	06/11/16	2	WVARA	Concession Sales; (Svend Jensen)	329.58
Deposit	06/11/16		WVARA	Gate Fees; Net (Bill Fehring)	3,015.00
Total 4	4150 — Flea	Market Re	ciepts		3,809.15
Total 4	100 — Progr	am Income	2	<u>-</u>	3,809.15
Total Inc	ome				3,809.15
Expense					
5300 –	- Flea Market	t Expenses			
Check	02/20/16	2093	ASVARO	ASVARO Fees	2,300.00
Check	06/11/16	2	Jensen, Svend	Fuel for Borrowed Van	30.35
Check	06/11/16	2	Jensen, Svend	Smart & Final, Sodas	44.32
Check	06/11/16	2	Jensen, Svend	Lucky, Bananas	5.91
Check	06/11/16	2	Jensen, Svend	Lou (ASVARO) – sodas	20.00
Check	06/11/16	2	Jensen, Svend	Lou (ASVARO) – Donuts	132.00
Check	07/11/16	2097	Smith, Kevin	Reiburse Coffee Purchase; CostCo	19.98
Total 5	300 — Flea N	Market Exp	enses		2,552.56
Total Ex	pense			<u>-</u>	2,552.56
Net Incon	ne			<u>-</u>	1,256.59

WVARA Statement of Activity January through July 2016

08/10/16

january amought, jury 2020	May '16	Jun '16	ul '16	ΓΟΤΑL
Income				
4200 — Misc. Income	0.04	0.04	0.00	0.24
4100 — Program Income				
4110 — Membership Dues				
4111 — Indiv. Assn. (\$15)	45.00	15.00	0.00	480.00
4112 — Indiv. Repeater (12)	36.00	12.00	0.00	252.00
4113 — Fam. Assn. (\$20)	0.00	20.00	0.00	160.00
4114 — Fam. Repeater (\$18)	0.00	0.00	0.00	108.00
Total 4110 — Membership Dues	81.00	47.00	0.00	1,000.00
4150 — Flea Market Reciepts	0.00	3,809.15	0.00	3,809.15
Total 4100 — Program Income	81.00	3,856.15	0.00	4,809.15
4800 — Donations	3.00	0.00	0.00	213.00
Total Income	718.04 84.04	233.034856.19	62.04 0.00	69. % 4022.39
Expense				
5300 — Flea Market Expenses	0.00	232.58	19.98	2,552.56
5100 — Administrative Expenses				
5110 — Finance Fees Paid	2.16	1.96	0.00	25.20
5140 — Web Hosting Expense	0.00	0.00	0.00	59.40
5160 — Officer Awards	0.00	0.00	0.00	29.33
Total 5100 — Administrative Expenses	2.16	1.96	0.00	113.93
5200 — Membership Expenses				
5240 — Summer Picnic	85.00	0.00	0.00	85.00
5210 — Badges	16.00 0.00	0.00 0.00	0.00 0.00	0.00 16.00
Total 5200 — Membership Expenses	85.00	0.00	0.00	101.00
5500 — Program Expenses				
5540 — Misc. Expenses	979.71	0.00	0.00	979.71
6000 — Repeater Expenses				
6100 — Repeater Maintenance	0.00	0.00	0.00	243.21
Total 6000 — Repeater Expenses	0.00	0.00	0.00	243.21
Total 5500 — Program Expenses	979.71	0.00	0.00	1,222.92
Total Expense	1,066.87	234.54	19.98	3,990.41
Net Income	-982.83	3,621.65	-19.98	1,031.98

WVARA Statement of Position	08/10/16	Ham Crams
As of July 31, 2016	00/10/10	Los Gatos/Monte Sereno ARES/RAC-
ASSETS Current Assets Checking/Savings 1000 — Financial Accounts 1100 — Checking 1200 — Savings	Jul 31, '16 4,353.24 4,494.71	ES is planning on offering ham crams on November 12. These classes run from 8:00 AM to 5:30 PM. Contact Peter Hertan, K6PLH <pre>phertan at alum. mit.edu> for more information.</pre>
1300 — Paypal 1900 — Cash	2,828.22	73 Bill AE6JV
1910 — Petty Cash Total 1900 — Cash Total 1000 — Financial Accounts Total Checking/Savings Total Current Assets TOTAL ASSETS LIABILITIES & EQUITY Equity	120.23 120.23 11,796.40 11,796.40 11,796.40 11,796.40	Pacificon 2016 Friday Oct 14 - Sunday Oct 16
3300 — Unrestricted Net Assets 3310 — Associaton Balance 3320 — Repeater Balance Total 3300 — Unrestricted Net Assets Net Income Total Equity TOTAL LIABILITIES & EQUITY	7,315.51 3,448.91 10,764.42 1,031.98 11,796.40 11,796.40	San Ramon Marriott 2600 Bishop Drive San Ramon, CA 94583 www.pacificon.org

2016 West Valley Amateur Radio Association Board

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