January 2025



THE BIG ISLAND HAMGRAM

The newsletter of the Big Island Amateur Radio Club

QST, QST, QST: Ideas needed for 2025 programs and activities

The BIARC Programs and Operating Activities Committees need input from club members regarding what programs and activities they would be interested in.

"We need this information ASAP, in order to make arrangements and for budgeting purposes," said Joseph Rosenbaum, WH6JOE, the Operating Activities chair. If you have any ideas, please send an email to him at wh6joe@gmail.com.

Joe announced that the January member activity will be a presentation by William, NH6ET, on "Introduction to Decibels." Learn how decibels are used for power, antenna and amplifier gain. The talk will also include information about cable loss and filter performance.

Also, Tony, WH6DVI, will talk about the new ARRL/ARES plan.

Waimea Hamfest Saturday, Feb. 15

The Hawaii Island International Hamfest will be held on Saturday, February 15, at the Waimea Community Center, next to the ballfield off Kawaihae Road in Waimea (Kamuela).

There will be a \$10 donation per table per seller.
There will be a \$5 donation per attendee at registration.



WH6JOE photo As is tradition, the club's December gathering was dedicated to food, fun and fellowship at the Kamana Senior Center in Hilo. (See Page 2 for more photos.)



Photo by Joanne Farley WH6HI, WH6GXZ and WH6JOE on POTA excursion to Akaka Falls.





HI Volcanoes NP — WH6HI, above.

In search of the POTA quota

Over the last few months, small bands of intrepid radioactive explorers linked to BIARC have been on the hunt to get their POTA quota. Locations, equipment and hams have varied for these ARRL Parks on the Air activities.

In late December, Duane, WH6HI, Shawn, WH6GXZ, and Joe, WH6JOE, went to Akaka Falls for a POTA activation. There were a couple of pileups, and WH6JOE made 132 QSOs covering 37 states and 3 foreign countries. WH6HI had 39 contacts.

The setup: 10 meter efhw, deployed horizontally, suspended from the van using a 10 ft pvc mast to the 25 ft sota beam mast. Radio: Yaesu ft-891, at 100 watts, hooked up to a battery (20 amh lipo4).

Continued on Page 3

Continued on next page



From previous page

O T

The group followed this up with a second POTA excursion on Christmas Eve day at Hawaii Volcanoes National Park.

On New Year's Day, WH6HI and WH6JOE returned to the Volcano park and from

about 11:10 am to 1:10 pm reeled in 71 contacts spanning all across the mainland USA and a few other countries, such as Mexico, Brazil, Chile and Ecuador.

"We did a two-for activation. Duane called CQ and when he was done with the contact he would hand me the mic to work the same contact," said Joe. "This was all on the technician voice portion of the 10 meter band from 28.300 MHZ to 28.500 MHZ."

They used an HFkits antenna. www.hfkits.com

Waimea Hamfest set for Feb. 15

From Page 1

One raffle ticket is included with registration. Additional tickets will be available for \$1 apiece.

Schedule:

8 am - breakfast at Hawaiian Style Cafe

9 am - vendor setup

9:30 am - Doors open to the public. Be sure to get your raffle tickets for the "Big ticket item"

12:30 pm - Presentation (TBD)

1 pm - Event ends

Guest Speaker this year: To be determined.

Information:

There will be surprise giveaways throughout the day.

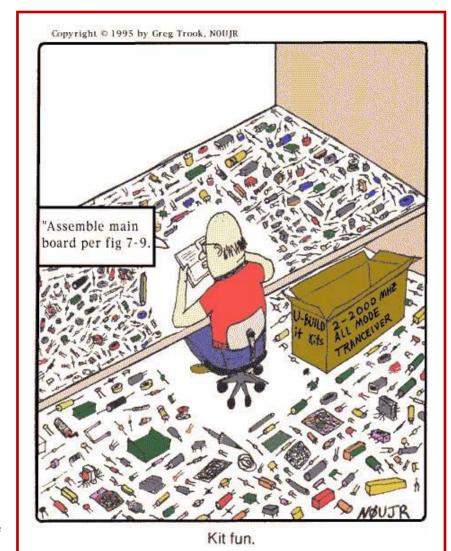
Talk in on 146.940 Maui Repeater, 147.32 Waimea Repeater (tone 100)

This is an event sponsored by the Kohala Hamakua Radio Club (KHRC).

This is an island-wide event, so tell all your radio friends.

For more information, contact Steve Milner – wh6n@arrl.net

Please note: This non-commercial event promotes the trading of equipment and information between hams and the general public and promotes the open exchange of exploring Ham radio as a hobby.



THE PRESIDENT'S



CORNER

Thomas Avila, KH6GG

Hello, Hams:

I wanted to tell you how much I appreciated the last year heading the Big Island Amateur Radio Club. I've learned a lot and I continue to do so.

I have learned the basics of CW and its alluring draw. I'm still working on using my paddle but my head copy is definitely better than I had imagined.

I got to this point by using a couple of apps I found on the Google app store and an interesting website that uses an interface for your paddle. The site was de-



site uses an interface for your paddle or straight key. The site was developed by Ham Radio Solutions and the interface is called the Vband.

An interesting web-

veloped by Ham Radio Solutions and the interface is called the Vband. Duane WH6HI and I purchased a couple of Vbands to help learn CW and the website has online training rooms as well as chat rooms you can use for practice and conversing via CW. The most interesting part is that anybody can use the site for free. This has brought a ton of people into learning CW and making it

so they want to delve deeper into Ham radio.

I've also started using an interesting part of the USB protocol to my advantage. USB PD (power delivery) has the ability to output more than just 5 volts. I've found trigger boards that range the spectrum. From 5, 9, 12, 15, 20, and now 28 volts.

Continued on Page 5

Lightning does its damage

By Hank Kaul, KH6HAK

Well I THOUGHT I had survived that lightning stroke.

But delayed consequences showed their ugly face. I should first describe how an RF power amplifier transistor is physically constructed. There is not just one transistor junction inside that case. I have seen the insides, and there is typically 10 transistor dies inside, all connected in parallel. They all work together to handle the rated power of the device. It is possible for a static pulse to destroy just one of those transistor junctions, and the device will keep on operating at slightly reduced power, but in a weakened state.

So after the lightning flash, my IC-910H satellite radio for the V/U bands appeared to work fine for a couple weeks. Then I began to have intermittent power shutdowns when transmitting. Turning the power output down a bit took care of the problem, but I suspected I had some antenna or line damage with VSWR causing the shutdowns. The problem kept happening at reduced power levels.

Next I examined my lightning arrestors outside at the mast. All looked OK, and my antenna analyzer showed the antennas and lines to be nominally OK.

So next I put the IC-910H radio on a dummy load, and to my dismay it continued to fault shutdown even at minimum power. It was obvious then that the final PA transistor had a cascading fault as the power handling capability went down and down as the transistor 'dominoes' inside failed. So my beloved IC-910H was toast. This was the radio I used to talk to the commander of the ISS on 2022 Field Day. The radio is no longer made nor supported by Icom.

As incredible luck would have it, I discovered another IC-910H in excellent condition on eBay. I contacted the ham seller and negotiated a price and shipping. It cost me a grand, but... what price for a beloved radio?

I have been reduced to using my Yaesu FT-70D portable rig connected to my base antenna to work the Kulani repeater nets.

I asked for priority mail shipping, hoping to get it before Christmas. Unfortunately the seller opted to save a few bucks and sent it "Ground Advantage". I have learned that postal method may be an 'advantage' on the mainland, but not to Hawaii. Tracking packages they get to the west coast and stall. Probably aggregated to a container full, then shipped on a slow boat, then unloaded in Hawaii

as last priority. I have had 'ground advantage' packages stall for 30 days like this. Then suddenly one day they appear at my local post office and get delivered.

So maybe sometime in January, likely after this is published, I might have my 'new' old radio.

Now in an effort to NOT have this happen again, I will also be installing coax relays on the VHF and UHF antenna lines. When the system powers down, the radio will be switched into a dummy load, and the antenna lines will be disconnected. This method worked for the HF rig, and it is still transmitting.

But never underestimate lightning. Some call it 'Thor's Hammer'... for good reason.



THE PRESIDENT'S CORNER

From Page 3

Not every power supply can do it but I've managed to squeeze out 12 volts at 2.5 amps from a couple of my USB battery supplies and more than a few plug-in chargers. Taking that 12 volts and feeding it to Anderson power plugs has become the way to go for me.

Between learning more about digital modes, finally getting a 40 meter telescopic vertical antenna for my Xiegu x6200 and getting better at filming (I'm still working on editing), I look forward to what this next year will bring our way.

I'll be working on getting on the air by any

Ham Radio Solutions CW Hotline

Main Connect

Ham Radio Solutions is pleased to offer CW Hotline, a WiFi connected CW tool. CW Hotline was designed to provide a way to key a remote radio station in CW mode, but can be also used as a private Morse code link to friends. Think "The Bat Phone" for CW. It is available with either a built in straight key or paddles, or neither if only external keys will be used. Once it is configured with the local WiFi information, just power up, it will link with selected peers and be ready to send and receive.

means and hopefully making more contacts with you folks and anyone else that can hear me.

If anyone else is interested

in learning CW or learning its history, feel free to reach out. We have a few Elmers who say they'll come out of retirement to help anyone interested.

Winter Field Day 2025



Winter Field Day (WFD), hosted by the Winter Field Day Association, is scheduled to run from 1900 UTC on Saturday, January 25, through 1859 UTC on Sunday, January 26.

WFD is held on the last full weekend in January and is a communications exercise that can be worked from the comfort of your home or from a remote location. You can participate by yourself, with your friends and family, or with a local club.

WFD is designed to help increase your level of preparedness for disasters and for you to improve and practice your operating skills in winter environments, as the potential for freezing temperatures, snow, ice, and other hazards present unique operating conditions.

WFD is open to participants worldwide. Amateur radio operators may use frequencies on the HF, VHF, or UHF bands and are free to use any mode that can faithfully transmit the required exchange intact. Similar to ARRL's Field Day, bonus points are earned in several ways, including from using non-commercial power sources, operating from remote locations, making satellite contacts, and more. Make sure you register your location at the WFD registration page. To date, there are 345 locations registered around the world.

Also, remember to mark your calendar for 2025 ARRL Field Day on June 28 - 29. For additional information, visit Field Day (arrl.org).

The BIARC channel on Youtube is: https:// www.youtube.com/ @BigIslandAmateurRadio-Club

BIARC monthly meeting info

The club gets together on the second Sunday of the month at Kamana Senior Center at 127 Kamana St. in Hilo. All are welcome.

The Executive Board meets at noon, with the

membership gathering following at 2 p.m. Internet access is provided.

The link is shared on the BIARC website, https://biarc.net, prior to the meeting.

Monthly Siren Report for January 2025

Happy New Year from the hard-working volunteers of the Big Island ARES Group. Here is the January 2025 siren report, courtesy of Darrell Asuka, KH6RDO.

Location	Observer	Mode	Status		
			NOT WORKIN Not Working		
Ainaloa (HA910)	WH6DVI	Mauna Kea			
HOVE, #1 Leilani (HA805)	KH6FA	Email	Not Working		
			WORKING		
Ainako Park (HA117)	WH6FSA	Allstar	Working		
Banyan / Kam (HA104)	KH6ATU	Text	Working		
Captain Cook (HA702)	WH6WF	Text	Working		
Cooper Center Volcano (HA936)	KH7DQ	Mauna Kea	Working		
Downtown Federal Bldg (HA107)	WH6HBH	Allstar	Working		
Hakalau (HA113)	WH6ECX	Text	Working		
Hawaiian Beaches Park #1 (HA907)	KH7LM	Mauna Kea	Working		
Honomu (HA111)	KH6RDO	Allstar	Working		
HOVE Reef Blvd #3 (HA809)	WH6FC	Text	Working		
HPP #2 4th & Awapuhi (HA912)	WH6HAA	Mauna Kea	Working		
HPP #3 6th & Makuu (HA913)	NH6OV	Mauna Kea	Working		
HPP #1 Paradise / Ala Kai (HA925)	KH6CZ	Mauna Kea	Working		
Kawaihae Harbor (HA407)	WH6EHJ	Mauna Kea	Working		
Kehana Beach (HA916)	KH6AQ	Text	Working		
Laupahoehoe Lookout (HA201)	WH6FSE	Allstar	Working		
Laupahoehoe Point (HA202)	WH6FSI	Allstar	Working		
Leleiwi (HA101)	KI6HBZ	Allstar	Working		
NELHA Kona (HA611)	WH6GTD	Text	Working		
Ookala (HA304)	WH6GDC	Text	Working		
Pahala (HA804)	WH7BR	Allstar	Working		
Puako General Store #1 (HA405)	WH6EHJ	Mauna Kea	Working		
State Building (HA116)	WH6FDE	Email	Working		
Waa Waa (HA937)	NH7PE	Text	Working		
Waiaka Bridge Kamuela (HA402)	WH6EHJ	Allstar	Working		
Waikaumalo Park Ninole (HA123)	WH6FIQ	Text	Working		
Waimea Park Kamuela (HA401)	WH6EHJ	Mauna Kea	Working		
Carvalho Park (HA114)	NH6WT	Email	Working		
Honoapu (HA802)	WH6HC	Email	Working		
Naalehu (HA801)	WH6HC	Email	Working		
Old Kona Airport (HA609)	KH7MS	Email	Working		



Notes

ARRL Division News

Pacific Division

Please join us for the Pacific Division Town Hall Meeting on Saturday, January 11th at 10AM PDT. We will again meet on Zoom for this meeting to allow all those in the Pacific Division to attend.

Meeting Information:

ARRL Pacific Division Town Hall Meeting

When: Jan 11, 2025 10:00 AM Pacific Time (US and Canada)

Please Register in advance for this meeting:

us06web.zoom.us/meeting/register/xH7c04IVQrSMaVNqGp34SQ

After registering, you will receive a confirmation email containing information about joining the meeting. Please allow a day or two before seeing the confirmation with the meeting link and information.

The meeting is being held to provide quick updates about topics related to the division, information before the ARRL Board meeting scheduled to be held in Newington on January 17th and 18th and to allow time for those attending to provide comment/feedback and questions. Hope to see everyone at the Town Hall Meeting on Zoom.

Anthony Marcin, W7XM

ARRL Pacific Division Director

w7xm@arrl.org

ARRL Podcasts



On the Air

Sponsored by Icom

Learn Even More with On the Air Live

In early 2025, the ARRL Education & Learning Department will launch an interactive livestreamed video podcast, *On the Air Live*. The monthly episodes will be aimed toward educating new and intermediate-level hams, inspiring them to explore

the nearly endless aspects of amateur radio and develop their skills. ARRL Education Specialist Wayne Greene, KB4DSF, who will host each episode, joins the On the Air podcast to share more details, including upcoming topics and how to participate in real time.



ARRL Audio News

Listen to ARRL Audio News, available every Friday. ARRL Audio News is a summary of the week's top news stories in the world of amateur radio and ARRL, along with interviews and other features.

The On the Air podcast and ARRL Audio News are available on blubrry, iTunes, and Apple Podcasts.

On the Air | ARRL Audio News



year:

Dues are due

Access the club's interactive website:

biarc.net



Membership Types & Annual Dues

Adult Full Members \$25 Adult Associate* Members \$12.50 Youth Full Members \$6.25 Youth Associate* Members - No Dues

Dues are payable in December of each year for the following calendar year. Dues for **first time** full members who join the club on or after March 1st are \$2.50 per month through and including the following December. Dues for **first time** Associate adult members who join on or after March 1st are \$1.25 per month through and including the following December. Youth full members who join on or after March 1st need not pay dues until the following December or their 18th birthday, whichever occurs first.

* Associate members are those who do not hold an FCC-issued Amateur Radio

license or those who are licensed with a license address outside of Hawaii County. Associate BIARC membership is equivalent to full membership, but they do not have voting privileges at membership meetings.

Note: If your license address is not in Hawaii County or you do not hold a valid amateur radio license, then you may only join as an associate member.

Family Membership Discount

Dues are for individual memberships except that two or more related Adult Full Members living at the same address may choose to make a single dues payment of \$37.50 per year. In this case, the name and type of individual membership for each family member must be specified at the time of payment.

BIARC Membership Application - PDF (Printable)

The PDF application may be completed online. Please save and email completed applications to BIARCTreasurer@gmail.com or print and mail to BIARC at the P.O. Box address listed below along with your payment.

You may click the 'Donate' button below and use the secure PayPal online payment gateway to join BIARC or renew your membership.

If paying online a 10% convenience fee is required.

Add \$2.50 for full membership, \$1.25 for associate membership, and \$3.75 for a family membership.

Thank you for your membership in BIARC!

BIARC is a 501(c)(7) tax-exempt entity, supported by our members and volunteers. Please consider making a donation.



Note: BIARC donations are not tax deductable.

Except where noted, all original content Copyright © BIARC.net and Big Island
Amateur Radio Club 2005 - 2024.

All rights reserved.

Big Island Amateur Radio Club. P. O. Box 1938, Hilo, HI 96721-1938.



Nets alive & well in Hawaii: The annual summary

Mahalol
Shirley and I want to thank all of you who helped support 40meter net last year. I
would also like to thank all of you who participate in the nets, and especially those of
you who are able to act as Net Control Ops. -Konabob (AHGGT)

40meter.net Log Summary (2024) (AH6T)

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Year	Avr. YTD
Participation:														
# of Nets		181	201	184	199	180	201	193	191	110	180	110		175.5
Total Check-ins				2485	2791	2957	2783	2774	2398	3274	2195	2499		2684.0
Unique Calls		318	358	297	323	372	309	305	273	285	262	272		306.727
Licensed Amateurs in Hav	waii						3529	3524	3514	3498	3482	3479		
% of HI Calls							8.8%	8.7%	7.8%	8.1%	7.5%	7.8%		8.1%
Number of Nets/Month														
HF Nets	103	101	107	103	107	102	106	109	111	115	108	110		106.8
HF Digital Nets	11	11	8	9	9	9	11	12	13	13	6	8		10.0
VHF/UHF Nets	69	69	86	72	82	69	83	72	67	74	65	70		73.2
CERT Nets	1	0	0	0	1	0	1	0	0	0	1	0		0.3
Total Nets	184	181	201	184	199	180	201	193	191	202	180	188		190.3
Man-Hrs/Month	1053.71	1000	200	1021		1111111	(15.00)		9000	100		55555		25555
HF Nets	1,266.3	1,349.8	1,244.2	1,159.8	1,147.8	1,127.5	1.077.3	1,270.0	1,140.5	1,130.0	1,022.9	1,152.7		1174.1
HF Digital Nets	56.8	33.7	110.9	50.8	51.2	36.5	123.2	64.0	52.6	75.6	317.2	16.1		82.4
VHF/UHF Nets	580.0	747.7	629.5	537.5	664.7	599.0	814.7	656.6	548.2	442.5	628.1	814.3		638.5
CERT Nets	1.3	0.0	0.0	0.0	2.5	0.0	1.3	0.0	0.0	0.0	2.3	0.0		0.6
Total Man-Hrs	1,904.3	2.131.2	1,984.6	1,748.1	1.866.2	1,763.0	2.016.5	1,990.6	1.741.3	1,648.2	1,970.4	1,983.1		1895.6
% Man-Hrs/Nets	13													
HF Nets	66.5%	63.3%	62.7%	66.3%	61.5%	64.0%	53.4%	63.8%	65.5%	68.6%	51.9%	0.581288		62.1%
HF Digital Nets	3.0%	1.6%	5.6%	2.9%	2.7%	2.1%	6.1%	3.2%	3.0%	4.6%	16.1%	0.008102		4.3%
VHF/UHF Nets	30.5%	35.1%	31.7%	30.7%	35.6%	34.0%	40.4%	33.0%	31.5%	29.1%	31.9%	0.41061		33.7%
CERT Nets	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0		0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
Hawaii Amateur Licenses	(30 Nov 24)													
	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24		
Hawaii Licenses: Class					650			100						
Novice							25	25	25	25	25	24		
Technician							1944	1945	1947	1938	1927	1929		
General							748	746	740	737	733	729		
Advanced							135	134	130	128	128	127		
Extra							677	674	672	670	669	670		
Total							3529	3524	3514	3498	3482	3479		

December-24											
Call	Ck-ins	Call	Ck-ins	Call	Ck-ins	Call	Ck-ins	Call	Ck-ins	Call	Ck-in
KH6HHG	109	NH7VI	16	KH6HI	5	WHECON	3	WH6GWH	1	KH6L	1
WHSFC	106	WH6GYD	16	ZL1SPR	5	WH6OZ	3	WH6BL	1	KH6RD0	1
KH6GM	100	WH6GBX	16	M3MDC	5	KH7MU	2	KO6YDH	1	WH6EKU	1
KH6PXM	96	WH6MEL	16	WH6FSG	5	KH6OWT	2	KD6DY	1	AH6IX.	1
KH6I	71	AH6WI	14	WH6GDC	5	WH6AV	2	BA7KHZ	1	AH6Q	1
NH6M	66	KH7WM	14	WH6GTC	5	WB2CAT	2	WH6GHS	1	KG6CFC	1
WH6GYC	66	N1VA	14	KH6LY	5	NT6E	2	WH6GHT	1	KH6CP	1
WH6ECG	47	WH6GPU	13	KH6WG	5	KE7LEI	2	AH7E	1	WH6BS	-1
WH6KM	41	KH6DLK	13	KH6OWL	5	WH6GHX	2	KC5DWD	1	KH6UU	1
WH7Q	38	WH6EMN	13	WH6GCD	5	WH6GZD	2	WH6GFH	1	KH6TU	1
AH6GT	38	WH6TSW	13	WH6HCM	5	WH6EQU	2	WH6GRH1	1	AH7L	1
KH6BI	31	KH6TOD	13	NH7PE	4	KH7HO	2	NO	1	KOWET	1
KH7EH	31	NH6WT	12	NH6ET	4	AJOT	2	KH6MEL	1	N4RJB	1
AH6V	30	WH6I	12	AH7MA	4	KH6NLU	2	NH7J	1	NU3E	1
KH7TV	28	WH6HBC	12	KH6DH	4	WH6CPH	2	AH6IM	1	KH6KA	1
WH7CD	28	WH6EPS	11	KH7CN	4	WH6FSI	2	KH7HAF	1	WH6A	1
WH6GZL	28	WH6LC	11	KB3AY	4	WH6FSJ	2	KH7PKK	1	WH6HCA	1
AH6J	28	AH6DL	10	WHEFQZ	4	WH6FSK	2	WH6GZK	1		
WH6GZP	28	KH7MS	10	KH6CZ	4	WH6FSD	2	WH6HBH	1		
WH6GWU	28	WH6RJG	10	WHEDCC	4	WHEECX	2	NHTWT			
AH6KW	26	KH6HAK	9	KH6EJZ	4	KD5VF	2	WH6GOG	4		
AH6H	26	WH6HAA	9	WHOLOL	4	KH6OX	2	WH6GZN			
AH6MU	26	NH6EV	8	WH6GZE	4	W8EKD	2	WH6HBB	- 4		
WA7ZK	25	WHEHAU	8	AHBVF	4	W8NLD	2	AH6OO			
WH6CYD	25	KH7GN	8	WH6HAS	4	WH7QQ	2	NH7ZT			
WH6JOE	24	WHEETE	8	WH7PD	4	WH6FLQ	2	AH6QO			
	-		_		4		1				
WH7D	24	WH6ACT	8	KH6RF	4	KH6BB KH7O	4	WH6FLO NH6PY	1		
KH6MOI	-	NH7YS	7	NH6IY	4		1		1		
WH6DWF	24	WH6GVN		WH6DZS		KH6GL	20.00	WHISTE	1		
WH6GNK	23	AH6RK	7	KH6OJ	3	KH6CE	1	WH6JEN	1		
SM2AYE	23	KH6KU	7	AH6JA	3	NH6XO	1	WH6CMO	1		
WH6BZ	23	WH6HC	7	K3SCH	3	KG60PE	1	HANS	1		
WH6HBR	23	WH6LQ	7	WH7WZ	3	KHERO	1	BENARD	1		
AH6EI	22	WH6GZZ	7	AH7RF	3	KH6IMB	1	WH6GBS	1		
AH6VG	22	KH6SEN	7	KH6DQ	3	KH6LOL	1	WH6GZY	1		
WH6GRT	22	WH6FSA	7	WH6LU	3	KH6IB	.1	WH6FSF	1		
WF1A	20	KI5VWE	7	KE7UUJ	3	KHERT	1	KH6HA	1		
KH6DK	20	KH6USN	7	WH6GXZ	3	KH6OM	1	WH7RE	1		
WH6GRO	20	AH6RR	6	WH6FSH	3	KH6FV	1	WH6TLD	1		
WD8DAS	19	KH6ML	6	WH6AOK	3			KH6H	1		
WH6BY	18	WH6EBS	6	WH6HAM.	3	WH6GWS	1	WH6AJT	1		
WH6GPZ	18	WH7GG	6	WH6GUI	3	WH7JOE	1	KG7CWF	1		
NOSEX	18	WH6GRW.	6	WH6GDM.	3			KH6HHT	1		
WH6GUH	18	AF0SF	6	N9SBL	3	KH7FX	1	WH6FQQ	1		
KH6HT	17	KH6ATU	6	WH60MG	3	AH6I	1	KH7DB	1		
KH6U	17	WH6GXF	6	WH6FUP	3	AH6OX	1	WH7DB	1		
KH7DQ	17	WH6GAJ	6	NOSEX	3	WH6BRX	1	NH7I	1		
AH6T	17	WHSHAY	6	WH6EIX	3	WH6HJ	1	AH6EK	1		
KB6EGA	16	KH6LT	6	WH6ESA	3	WHSHCJ	1	WH6GQD	1		
KH6LK	16	KH6IHK	6	KH6JU	3	WG6GTK	1	WH6GAN	1		
	0.00	KH6EKD	6	KH6D	3	WH6BPZ	1	NH7IT	1		