



Volume 8, Issue 4
12/2024

the exchange

See Page 5 for details about our new meeting place!

SWODXA
WWW.SWODXA.ORG

South West Ohio Association

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The Prez says.....

Happy Holidays to you and yours!

I hope you will get some needed ATNO's and Band slots for Christmas.

I want to take a minute to thank you all for being members! We have had some challenges the past year or so and the club is still growing. Now, we have had to move to a new meeting place. Check out page 5 for our latest "home". Ken did the leg work and found that there aren't many places out there for us. Since COVID, restaurants have gotten rid of their meeting rooms. Your feedback on this location is most appreciated. Of course, if you feel it is out of the way, you can always "ZOOM" in to the meetings.



INSIDE THIS ISSUE:

SWODXA Calendar	2
Club News	3
Classifieds	6
DX Friends	9
S52WD Interview	11
N5J DXpedition	14
Audio Amp Project	23
TX7W DXpedition	27
Club Contacts	47
Club Fact Sheet	49
DXpedition Donation	50

I had sent out an email in October about a classified section for the newsletter. Took me a bit of time, but that section is now included. Let me know what you think.

Finally, give some thought to the DXpedition of the Year®, DXpeditioner of the Year, and to our own W8OK winner. Your input is crucial to all of these and we will suddenly be making these critical decisions.

Happy New Year and Gud DX to you and yours!

73 and Gud DX
AJ8B => Bill

SWODXA 2025 Calendar

December 2024

6-8 ARRL 160M CW
 12 SWODXA Meeting
 14-15 ARRL 10M
 28-29 Stew Perry 160M CW

June 2025

12 SWODXA Meeting
 14- 16 ARRL VHF
 21-22 All Asian CW
 28-29 ARRL Field Day

January 2025

4-5 ARRL RTTY Roundup
 9 SWODXA Meeting
 18-20 ARRL January VHF
 24-26 CQWW 160M CW

July 2025

12-13 IARU HF Championship
 19- 20 CQWW VHF

February 2025

8-9 CQWW WPX RTTY
 13 SWODXA Meeting
 15-16 ARRL DX CW
 21-23 CQWW 160M SSB

August 2025

9- 10 WAE DX CW
 ??? Cincy Hamfest
 23 Ohio QSO Party

March 2025

1-2 ARRL DX SSB
 13 SWODXA Meeting
 29-30 CQWW WPX SSB

September 2025

6-7 All Asian DX SSB Contest
 13-15 ARRL Sept. VHF Contest
 11 SWODXA Meeting
 13-14 WAE DX SSB Contest

April 2025

10 SWODXA Meeting

October 2024

9 SWODXA Meeting
 25-26 CQWW DX SSB

May 2025

8 SWODXA Meeting
 16 SWODXA DX Dinner
 16-18 Dayton Hamvention
 24-25 CQWW WPX CW

November 2024

1-3 ARRL SS CW
 13 SWODXA Meeting
 15-17 ARRL SS SSB

Upcoming Club Dates and Topics

Meeting Date	Topic
Thursday, January 9th, 2025	POTA & SOTA—K4SWL— Thomas Witherspoon
Thursday, February 13th, 2025	FLEX 8000 Series— VA3MW - Michael Walker

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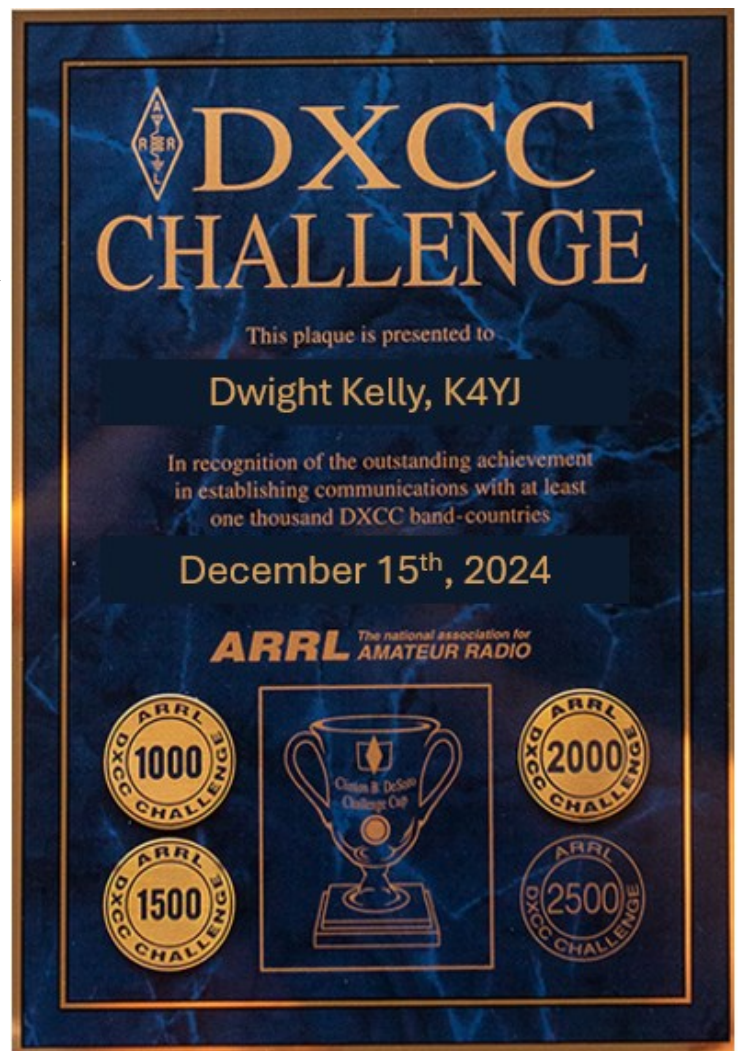
Congratulations!

Bill,

I wanted to let you know that I have finally reached the 2000 mark on my Challenge Award. I was down to just one for a long time. I worked the 10 meter contest and ended up working 352 contacts all CW, 118 multipliers with 59 countries.

After submitting my log, LOTW confirmed and I am now at 2001 Challenge points. So not only did I have fun in the contest, I finished a milestone in my award chase with the Challenge Award of 2000.

73, Dwight K4YJ



We Have A Meeting Place!!

We received numerous recommendations from members as to a new meeting place. Ken, KB8KE, call over 2 dozen different locations looking for a meeting place for at 25 people, an internet connection, monitor, and good food that was reasonably priced.

Several members recommended the winner and Ken agreed after talking to them AND stopping by for lunch. The winner is



Bourbons is located in Middletown at 2231 Verity Parkway. It is about 7.5 miles from I-75. <https://www.bourbonskitchenmiddletown.com/>

We are only on the hook for January, but Ken did reserve it through March. Just ask for the SWODXA room when you arrive. They will take your food order at your table.

If you like it, we can stay. If there are other venues we should try, just let us know. Thanks to all of you who sent in suggestions and to Ken for doing all of the “leg work”.



FOR SALE

We are listening these items for the benefit of the members.
SWODXA assumes no responsibility for these items.

K4ZLE—Jay (k4zle8@spectrum.net)	QST Magazines 2020 to current	Pick up or they can be delivered at the SWODXA meeting.
	CQ Magazines 2018 to 2023	
	QEX, Communications Quarterly— from beginning to 2023	
AJ8B—Bill (aj8b@arrl.net)	Bird Wattmeter with HF 2K slug	Contact me for details on shipping/hand off
	Yaesu FT-250R— HT— about 20 hours of usage with Charging stand— \$50	
	Yaesu FT-60R/E Dual Band HT— about 10 hours of usage \$75	
	Ameritron AL-80B Amp— works great— \$999	
	Rohn H50 50' Push Up Pole— Never Used— \$218 list— \$100	

FOR SALE

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<p>Jim Shaw AL7BA/8 jshaw32163@ gmail.com</p>	Flex Radio 6600M - \$3900, w/Flex FMH-3 Hand Mic (TRS/RCA)
	Flex Control Knob - \$99
	Elecraft KX-3 with several options: roofing filter, internal tuner, NiMH charger, KXPD3 keyer, MH-3 hand mic, tuner, battery compartment, clock, side handles, Plexiglass cover, Buddipole Lithium-Ion Nanophosphate battery pack (4S2P A123) and Multi-4 universal charger, Radiosport headset adapter cable, Pro Audio Eng AC PS, etc, \$2000 (All new ~\$2700). All in a nice soft-sided lunch container.
	Elecraft P3 Panadapter w/video/FFT adapter, 12VDC OUT current mod, \$700
	Elecraft KFL3A-1.8K by Inrad - \$125 ea
	Yaesu FT-7900 VHF/UHF Mobile - \$150
	MFJ 263 3GHz 300W N-Type Dummy Load - \$110
	CSI 700 UHF DMR HT with spkr mic, drop-in charger - \$75
	AnyTone AT-D858 UHF DMR HT with drop-in charger - \$30
	Original Super Antenna MP-1 - \$150
	W2IHY 3x4 Switch Plus Controller - \$425
	KV5J KPA1500 Digital Display Unit (DDU) (never used) - \$115 (ship included)
	LP-100A w/1.8-54MHz 1500W (3K peak) Coupler - \$425
	Palstar SP30H Comm Speaker - \$225
	Bose Companion 2 Series III powered speakers - \$65
	Alpha Delta DX-CC 10-80m Parallel Dipole 82 ft. - \$125
	80m center coil section for the DX Eng TW five-band antenna - \$300
	Yaesu YH-55 monaural headphones - \$25
B&W Coax Switches: Model 375, 6-port - \$25; Model 550-A - \$15	

FOR SALE

We are listening these items for the benefit of the members.
SWODXA assumes no responsibility for these items.

Stu—K8ST cell: 937.361.9199 stu@ stuholzer.com	MFJ-971 tuner .. \$100
	Yaesu FT-4X hand held with spare battery .. \$75
	Complete POTA setup ..
	Icom IC-705 with spare battery.. \$1000
	Icom LC-192 back pack for the 705 .. \$100
	Icom AH-705 antenna tuner .. \$175
	Buddipole POWER Mini .. \$100
	12 volt external battery Bioenno Power 12v-15ah .. \$100
	2- Chameleon MPAS 2.0 antenna systems .. \$350 each
	Chameleon CHA Sling bag .. \$50
	Chameleon CHA Hybrid-Micro .. \$150
	Vibroplex Iambic Standard paddle \$125

Updates from our DX Friends

This month's question was:

The ARRL has decided (for now) that they will no longer provide funds for the 10 regional QSL bureaus. If that happens, it will be up to clubs and/or individuals to help offset the cost. Another option might be to allow the bureau system to just shut down.

My question is "Do you use the QSL bureau? If you do, how often do you send cards to your outgoing bureau? How often do you receive cards?"

Please include any other thoughts or opinions you might have about the QSL bureau system.

Do you use the QSL bureau?

Only if needed - Contacts can order cards via OQRS.

If you do, how often do you send cards to your outgoing bureau?

Around three times a year. Only to those requesting a card from me via buro.

How often do you receive cards?

Around three times a year

I do not get new QSL cards for every activation but use a standard card and print actual individual data on the back side.

Best 73 de OZ2I Henning

Do you use the QSL bureau?

YES! I like real paper QSLs.

If you do, how often do you send cards to your outgoing bureau?

+6x / Year

How often do you receive cards?

+6x / Year

73, Laci OM2VL

DX Friends (cont.)

GA Bill,

Have not received nor sent any cards via the bureau for a few years. However, I have longstanding pre-paid postage credits at the W9 bureau.

73,

Philip, K9PL

Dear Bill,

I have sent hundreds of QSL-cards to the US Hams via bureau after checking on QRZ.com that they use the QSL-bureau. About 90% uses now only LOTW and 10% also the QSL- bureau service. this is my experience over the last years.

So if the regional QSL-service bureaus stop, I won't send paper QSLs anymore. My cards get lost and I won't receive any from US stations back.

I also experienced that many US hams sent me QSL direct and I always reply them direct. They say that QSLing via ARRL is too expensive so they now use US postage.

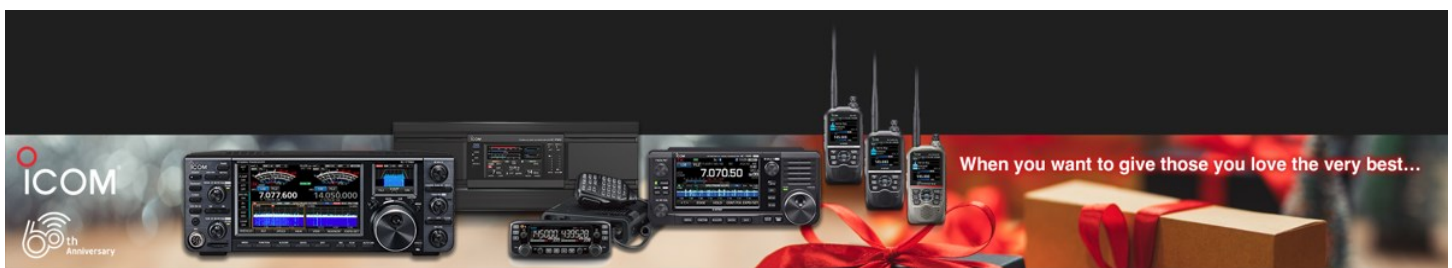
It would be a shame if paper QSL-ing stops via QSL-bureaus from the US.

73 Frans PC2F (alias W2PCF) this month active under PC38EUDXF

Hello Bill

I note this information, I exchange a lot with the USA for my USCA ,80 percent is direct, your service through the bureau remains quite expensive for many of you if my information is correct .

Yes I am a member of the French bureau, I send about every four months cards or three times a year and I receive every two months but less and less. I think the majority of contacts are made in digital mode and it is very fast and less expensive to pass confirmations through LOTW or other systems. It's still very virtual, too bad.73' and DX...



Interview with S52WD

Darko Mislej (darko.mislej@siol.net)

I worked Darko and he agreed to answer our questions. He responded with the info below. Thanks Darko.

AJ8B: How did you first get interested in amateur radio?

S52WD: I got interested in amateur radio in elementary school when the local radio club had a course. I was 14 years old. Now I'm 58. In the beginning, I had used club station rig, then I got my first call sign YT3WD, when the country became independent in 1991 I got the sign S52WD. I'm still member of radio club S59DEM in Postojna.

AJ8B: Do you have a favorite band or mode?

S52WD: My favorite mode is CW on HF bands. I operate also FT8 & FT4. I'm collecting DXCC. At the moment I have confirmed 299 DXCC mixed and 268 CW.

AJ8B: What time of day and days do you like to operate?

S52WD: Usually I operate late in the afternoon or in the evening.

AJ8B: Any secrets to your success?

S52WD: I don't have much success... I have collected the equipment and also built and set up the little antenna tower with antenna by myself. I'm not a »big gun«, maybe small gun. Now every new DXCC (ATNO) is success for me.

Our radioclub has cottage on the top of one hill. There is contest location mainly for 2 meters band. My club mates have won many contests on 2 meter band in our area (Alpe Adria contest...). Sometimes I also take part in the contest.

AJ8B: Any tips that you can share?

S52WD: Enjoy this hobby whatever you are young or old... on the frequency you are never alone.

AJ8B: Describe what you are currently using:

S52WD: I using: FT DX10 and FT 1000MP, ACOM 1011 power amplifier max. 700W
My antennas are DHF6 by Eco, 4 element beam (bands from 40m to 10m), 12 meters high, and an OCF dipole (bands from 80m to 10m).



Interview with S52WD (cont.)

AJ8B: What advice do you have for those of us trying to break pileups to work DX?

S52WD: You have to have good equipment these days and sometimes spend a lot of time to make QSO with rare DXCC. The use of the internet has caused congestion as soon as DX appears on the frequency.

Last year I didn't manage to make QSO with 3Y expedition on Bouvet island (sometimes I have heard them quite good), therefore I decided and bought power amplifier ACOM 1011 to be prepared to new expedition. Till then I had used just 100W.

AJ8B: What is your favorite contest?

S52WD: My favorite contest are CW and RTTY contest like CQWW CW.

AJ8B: Any QSLing hints?

S52WD: I send ATNO stations QSL cards direct or by OQRS. Others interesting QSO send by bureau. Whenever I get a QSL card I always send mine back too. I use also LOTW and eQSL but prefer paper QSL card.

AJ8B: What coaching/advice would you give new amateurs?

S52WD: Amateur radio is a great hobby for a lifetime.

AJ8B: If I were to stop by for a visit, what local place would you want us to visit?

S52WD: Slovenia is small beautiful country. In Postojna, 7 kilometers from my location, there is a famous Postojna cave (photo is on my QSL card). It's Carst cave with a lot of limestone stalactites. There is a train inside to take tourists inside the cave. We are on the coast in half an hour from my location and in one hour in the Alps with Bled and Bohinj lake. Two hours driving by car is Venice.



Interview with S52WD (cont.)

AJ8B: What local food would you want me to try?

S52WD: We have very good food here. It's a mixture of Italian, Mediterranean, Balkan and Austrian cuisine. Our region is known of prosciutto and sausage. We have also very good wine.

Thank you for contacting me.

73 and Gud DX

S52WD



N5J— The DXpedition to Jarvis Island

By Don Greenbaum, N1DG

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I am writing this on the way to Pago Pago from Jarvis Island. What a ride! And, no, I'm not talking about the storm we just went through, which had hurricane-strength winds peaking at 68 knots.

An idea is born

The trip to Jarvis really began eight years ago, right after the successful Baker Island DXpedition where we tried to keep a few operators on the ship and remote to the radios on the island. The remote idea was a total failure, yet the DXpedition was a great success, though it left the team totally exhausted.

On the way back to Fiji, George Wallner, AA7JV, said to me: "There has to be a better way." And so began a three-year process where the end result was a fully remote system, including a custom-made landing craft, software control systems, and custom-designed antennas made to work with reduced height and minimal guying. George's Radio-in-a-Box (RiB) system design DX Foundation (NCDXF) and tested successfully in the Bahamas. (See the Spring 2021 and Winter 2023 NCDXF newsletters for articles on the evolution of the RiB concept and design.)

In December 2021, we started the long process of approaching the superintendent of the Pacific Remote Island National Monument for a Special Use Permit allowing amateur radio on either Johnston or Jarvis Islands. We were quickly told that the U.S. Air Force was not in favor of visitors to Johnston, so we proceeded with Jarvis, where the U.S. Fish and Wildlife Service (USFWS) was eager to send a biologist.

First, a Compatibility Determination (CD) was needed. In September 2022, I met in person with USFWS personnel in Honolulu to describe the RiB system and the minimally invasive methods we could employ. We emphasized that, instead of 15 operators, 10 tents, 12 antennas, a toilet and seven generators as we used on Baker, we could replace that with a pontoon

N5J— (cont.)

amphibious boat containing all the radios and generators, six or seven vertical antennas of reduced height and no need to stay on the island. I brought along videos of the RiB in action in the Bahamas and detailed PowerPoint presentations explaining the system. And, we could offer needed transportation to their biologists.

After that meeting, the USFWS began the process of approving a CD based on a reduced footprint RiB activation. Finally, in January 2024, we received the good news of a positive determination. It was only then that we could formally apply for a special use permit (SUP). The CD empowered the superintendent (now a different person) to issue the terms and dates of a SUP for us and issue the actual permit. The date offered was August 2024 based on available USFWS personnel. While not an optimal date, DX-wise, it was what was offered and we accepted it.



Jarvis Island— 1936
(N1DG on the left and W8GEX on the right)

Jarvis Island history

The uninhabited 4.5 sq. km (1.7 sq. mile) coral island is located about halfway between Hawaii and the Cook Islands in the South Pacific, and the U.S. territory is administered by the USFWS as part of the National Wildlife Refuge system.

One of three Central Line Islands (Palmyra is one of the Northern Line Islands), Jarvis is the largest; the other two are Baker and Howland Islands. Jarvis, in addition to being part of a different island group than Palmyra, is also separated by the division of territory created by a treaty between the U.S. and Kiribati, signed in 2013. It deserves its own country status! Discovered in 1821 by Captain Brown on the British ship *Eliza Francis*, Jarvis was mined for guano in the late 1800s under the Guano Act of 1856 when it became a U.S. possession. It was placed under the jurisdiction of the Department of the Interior on May 13, 1936 (Executive Order 7368).

N5J— (cont.)

Jarvis truly is a long distance from everywhere.

The American Equatorial Islands Colonization Project was initiated in 1935 by the United States Department of Commerce to place U.S. citizens on the uninhabited islands of Howland, Baker and Jarvis so weather stations and landing could be built for military and use on Pan Am air routes Australia and California. Additionally, the U.S. government wanted to claim these remote islands to provide a check on eastern territorial expansion by Japan.

The colonists, who became known as Hui Panala`au, were primarily young native Hawaiian men and other male students recruited from schools in Hawaii. In 1937, the project was expanded to include Canton and Enderbury in the Phoenix Islands. The project ended in early 1942 when the colonists were evacuated from the islands at the start of the war in the Pacific.

Getting ready

After securing the SUP in early 2024, we had little time to organize the DXpedition, raise funding for fuel and boat personnel and recruit remote operators. In 2023, the MV Magnet, owned by AA7JV, had already entered the Pacific and by June 2024 we had successfully trained a core of remote operators with operations from FO, E5, VP6D, KH8S and KH8. The island team would be George, AA7JV; Tomi Pekarik, HA7RY; Adrian Ciuperca, KO8SCA, Mike Snow, KN4EEI, and myself, Don Greenbaum, N1DG.



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N5J— (cont.)

QSOs with any of these ops would also count for IOTA and POTA credit, a big change from previous program rules. That is how rare Jarvis was, and the award programs knew the restrictive USFWS rules prevented on-island operators. Since we were operating in the island refuge, exceptions were made. Remote operators not in the refuge wouldn't count.

The NCDXF stepped up with funding to cover the fuel costs — the largest part of the funding. Many other foundations and clubs provided additional funding to cover permit fees and other costs associated with an endeavor of this size. Our friends at DX Engineering and Flex were our main equipment suppliers, and individuals, as always, tossed in funds needed to activate this rare island.

We organized the two remote teams under Ned Stearns, AA7A (FT8), and Gerry Hull, W1VE (CW). Pilots were Donald Mikes, AA1V; Eiki Satomi, JH8JWF, and Manny Fonseca Junior, CT1FPQ. Remote ops were: Dennis Egan, W1UE (our top remote QSO generator); Axel Schernikau, DL6KVA; John Miller, K6MM; David Jaffe, WD6T; Ned, AA7A; Robin Alexander, W7YED; José Nunes, CT1BOH; Filipe Lopes, CT1ILT; Jose Emanuel Ribeiro De Sa, CT1EEB; Champ Muangamphun, E21EIC; Florian van der Wagt, PB8DX; Dan Craig, N6MJ; Hal Turley, W8HC; Paul Granger, F6EXV; Stan Stockton, K5GO; Seiji Okumura, JK1KSB; Angus Alexander, KJ7KOJ (age 17); Gerry, W1VE; Tack Kumagai, JE1CKA; Jon Kimball, KL2A; Peter Chamalian, W1RM; Ken Tanuma, JN1THL; Vlado Lesjak, E7ØT; David Heumann, N7NR; Mark Aaker, K6UFO; Eiki, JH8JWF; Emir-Braco Memic, E77DX; Jacky Calvo, ZL3CW; Miriam Briggs, N1QV; Ewan Alexander, KK7EXT (age 14); Mike, KN4EEI; Atilano Oms, PY5EG; Donald, AA1V; Stephen

Bloom, KL7SB; Kevin Rowett, K6TD; Roberto Ramirez, CE3CT; Lee Finkel, KY7M; Attila Holop, HA2NA; Felipe Hernandez, NP4Z; Sven Lovric, DJ4MX; Tom Bernson, ND2T; Todd Bendtsen, VE5MX; John Crovelli, W2GD; Lee Moyle, VK3GK; James Idelson, K1IR and Nathan Wood, K4NHW.

In July, the team operated as K8R from American Samoa as a thorough equipment test and warm-up, making 37,000 QSOs.

Just like the 2018 Baker Island DXpedition with the very first Fox/Hound activation, the Dateline DX Association was working with the WSJT-X developers to introduce another major advance in digital mode FT8 technology, the "SuperFox." We even had a special logo courtesy of MMØNDX and DX-World.net.

The RiB concept of the Jarvis DXpedition overcame permitting issues. As the largest sooty tern colony in the world, the USFWS has been very protective of large-scale visits to the island — the last amateur radio activity there was 34 years ago. We overcame that.

N5J— (cont.)



*Left: The RiB amphibious boat loaded on the deck of Magnet.
Right: Underway to Jarvis Island.*

Underway

On 31 July, the day arrived with the five-man team (already assembled from the K8R DXpedition) joined by the arrival of the three USFWS biologists. While we waited for optimal sailing weather, the USFWS personnel briefed us of the on-island rules, and we practiced safety drills aboard the Magnet, including jumping off the boat and climbing into a life raft.

The RiB amphibious boat (built by George and Mike out of a lake pontoon boat) was fully loaded and ready for fast deployment. This vital piece of the kit contained radios, amplifiers, generators, the 900 MHz link and most of the antennas.

On 2 August, we left the port of Pago Pago and dropped anchor on the northern side of American Samoa, positioned to leave before first light, and, the next morning we did just that, and started our nearly 1,900 km (1,180 mile) journey. Yes, Jarvis is a long distance away! Enroute we set up all the notebooks and checked out the data network.

After an uneventful 3-day journey, we arrived at Jarvis at around 0600 local time on 6 August, and by 0700, the first tender was loaded with Beth and Meagan (two of our USFWS monitors), George, and some supplies and headed to the island. George set the on-shore anchor for winching up the RiB boat and the USFWS approved the planned antenna locations.

N5J— (cont.)

Setup

The RiB boat was lowered and began to make its way to Jarvis piloted by Mike. Shortly afterwards, Adrian, Tomi, and I were on our way. By 0750 we were all on the island helping to position the RiB boat. The RiB, using the anchor set ashore, was winched up on the beach in a few minutes. Click the link to see the video of the RiB boat heading to Jarvis [youtu. be/4W3Q9iUhESI](https://youtu.be/4W3Q9iUhESI).

After positioning the RiB boat, Mike started the generators and set up the 900 MHz, 34Mbps link to the Magnet. George started up the radios and RiB-based notebooks; Tomi started laying out coax while Adrian and I started assembling antennas. The beach temperature was approaching 40°C (104°F). Meanwhile, the USFWS contingent moved down the beach and started setting up their camp by the day beacon.



First Trip to the Island

On the air

Within four hours of landing on the beach, five radios were up and running, the link was established, and three antennas were guyed and tuned. The ship's crew had delivered all the USFWS gear and fuel and other antennas that weren't on the RiB boat. It was time for a break, and we returned to the Magnet for lunch.

George quickly made sure all the ship's PCs were connected to the radios in the RiBs and let loose the first team of remote operators on three radios. Within four hours of the first landing on Jarvis, QSOs were appearing in the log. By the time we returned to Jarvis after lunch almost 1,000 QSOs were already in the log!

In the afternoon, while the remote teams had stations on the air, the five of us returned to the beach and set up the remaining verticals and the 15-20 Meter dual-band VDA antenna. By sunset we were exhausted, but the basic DXpedition was on the air with six radios (three with amplifiers), six antennas, and good connectivity over the internet. George was ready to operate 160!

This is a drone view of what the complete remote station on the island looked like after day one: [https://youtu.be/ L4bqsoHRLB4?si=L5wwucNQtMr_ FgBM](https://youtu.be/L4bqsoHRLB4?si=L5wwucNQtMr_FgBM)

N5J— (cont.)

The antenna work was never finished. On day three, our low-band RX DHDL went up and the 6-Meter beam (vertically polarized) was installed. USFWS monitors were concerned about the interaction of the tern bird colony (the largest in the world) and our guy wires. First, we added more flags and streamers to the antennas and guys. Then we reduced the height of the verticals and moved them from the berm to the sealine. By the end of the DXpedition, our 45-foot verticals were down to 23 feet, reducing the need for the high guy wires. Reports indicated few could tell the difference.

The DXpedition quickly took on a routine similar to other remote island adventures — checking antennas, refueling generators, fixing wires affected by salt corrosion, etc. One aspect of a RiB remote site is the need to maintain the link to the island while having a vessel that was not allowed to drop anchor in a coral reef. It required staffing the bridge 24/7, and constantly repositioning the boat so that the link didn't drop.

During our DXpedition we even made time to do two live interviews, one for the DX Engineering podcast and one live at the Pacific Northwest DX Convention during which KJ7K0J and KK7EXT were operating N5J remotely at the event in Everett, Washington.

Daily, we were adding 8,000 to 10,000 QSOs to our log. That was until the sun decided to send a bunch of CMEs our way, and our daily rate dropped by half. We started to doubt we would reach our goal of 100,000 QSOs, including 25% with Europe and 20,000 unique calls. We were pleased then when those goals were met, as the last few days saw some of the best conditions of the DXpedition and this solar cycle. Imagine, 2,000 160 Meter QSOs in the middle of the summer, reaching as far as southern and eastern Europe and the Middle East. FT8 QSOs were less than half the total. We were on the air 94% of the time at Jarvis. None of our homebrew solid-state amplifiers failed; no Flex radios failed, and other than one night when a generator shut down (one of three paralleled together), our uptime was impressive. And the three USFWS biologists were able to spend close to two weeks doing science on a remote island courtesy of the Amateur Radio community.



N5J— (cont.)

SuperFox

As previously mentioned, N5J was the first SuperFox DXpedition and our results were nothing short of fantastic. We had rates consistently around 200 QSOs per hour, per radio for most of the first week. Gradually the completion rate fell off and some stations just could not copy their R reports.

For some, it was having their radios set with too sharp a bandwidth; others had wrong AGC settings, and some had the wrong version of WSJT-X. Many sent us screen shots and those showed they were running JTDX and MHSV (not sure how they copied anything).

After a week, we accommodated these Hounds by switching some stations to the normal F/H mode to give everyone a chance at a Jarvis QSO on digital.

Teamwork

The local team made a quarter of the total QSOs while the remote operators accounted for over 80,000 QSOs. Unlike many large DXpeditions today, every QSO on FT8 was handcrafted. There were NO automated QSOs. Each of the five local ops played a different part in making this a success. The RiB technology (including homebrew amplifiers) required the engineering genius of George. Mike was instrumental in fabricating the RiB boat ensuring a 4-hour landing-to-first-QSO feat. I obtained the Special Use Permit through my volunteer work with USFWS and managed the finances. Tomi is an absolute QSO machine and our QSL manager. Adrian worked on the networking and PC issues that a highly advanced remote operation like this throws at a DXpedition. We had two dedicated remote team leaders (W1VE and AA7A) who ironed out scheduling and mode technical issues. W7YED was our Flex Radio guru.



Jarvis Island sign looked like when we arrived (above). Mike assisted USFWS personnel in repairing the sign. After cleaning off a decade of bird guano, the sign was repainted, making it look great for our team picture (below). Our close work with the USFWS and their appreciative response will be essential in our efforts to activate more protected entities around the world.



The Team. Bottom row from left: USFWS biologists Meagan, Justin and Anna. Top row from left: Mike, KN4EEI; George, AA7JV; Adrian, KO8SCA; Don, N1DG, and Tomi, HA7RY.

N5J— (cont.)

In conclusion, the RiB concept of the Jarvis DXpedition overcame permitting issues. As the largest sooty tern colony in the world, the USFWS has been very protective of large-scale visits to the island — the last amateur radio activity there was 34 years ago. We overcame that. Jarvis successfully introduced SuperFox to the world. All FT8 QSOs were handcrafted. No automated FT8 for us. Time at the island was 13 days, 7 hours — and 13 days were spent operating. A team of five local operators set up six radios, eight antennas, and even made 25,300 QSOs. An incredible group of 46 remote operators worked to make this a team success.

Club Log shows that over 14% of our QSOs resulted in a new country and over 43% of those QSOs handed out a new band counter to those in its database. We feel that is the measure of a successful DXpedition. The 2024 Jarvis Island DXpedition thanks the staff of the USFWS in Hawaii for their hard work in approving this minimally invasive operation on Jarvis Island NWR. Jarvis is part of the Pacific Remote Islands Marine National Monument (MNM). The MNM encompasses approximately 495,189 square miles of open ocean, coral reef and island habitats, making the total area of the MNM nearly five times larger than all the U.S. National Parks combined, and nearly twice the size of Texas. Within the boundaries of the MNM rest seven national wildlife refuges: Howland, Baker, Jarvis, Johnston, Wake, Palmyra and Kingman. Since 1871, the USFWS has been the only federal government agency whose primary responsibility is to manage fish and wildlife resources in the public trust for people today and future generations.

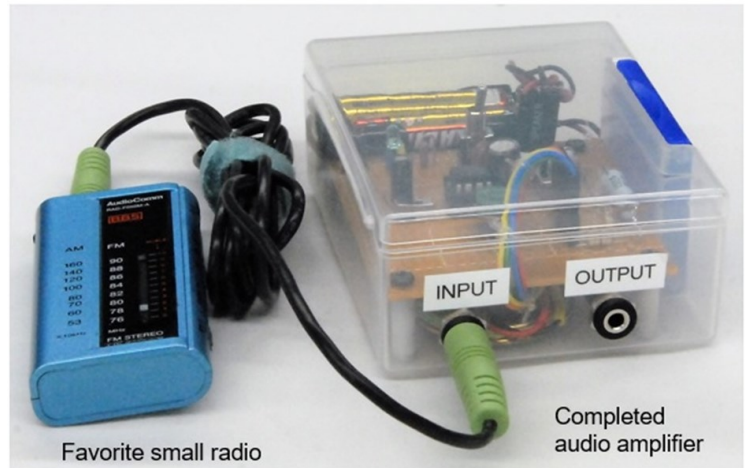
Now we can all sit, relax, and rejoice in our success and plan the next adventure using new technology we are now dreaming about.

the Baker/Jarvis Comparison Card	Baker	Jarvis
Club Log's Most Wanted List ranking	12	18
Number of QSOs/uniques	69,000/ 18,091	106,892/ 21,298
Days on/at island	12	13.5
Days operating	9	13
People camping	11	0
Shower, toilet	2	0
Radios/amplifiers	6/6	6/3
Antennas	12	8
Tents with tables and chairs	10	0
Generators	8	4
Gasoline used (gallons)	300	120
Water used on island (gallons)	400	1
Set up time before first QSOs (hours)	48	4
Time to tear down and pack up (hours)	24	3

Building and Audio Amplifier using an LM386 Chip

I came across this article from one of the sources that we use for newsletters etc. I gained permission to reprint and thought it would be a fun Winter project. Let me know. (Going to try it on the grandkids!)

I commute to work every day while listening to SDR radio broadcasts. The radio is so small that it can be hidden when you hold it in your hand. There is no speaker in the radio, so the output is only to an earphone. You don't need a speaker for you to listen to it on your way to work, but sometimes you may want to have a speaker when you're listening to AM broadcasts while doing something else. I would like to introduce a simple audio amplifier made using an LM386 IC chip.



Determining specifications

Since the small radio operates on a single AAA battery, I aimed for a compact size that will also operate on dry batteries for the audio amplifier I made this time. I tried to make the amplifier without incurring a high cost. The case would be obtained at a Dollar Store. Install a built-in speaker of about 80 / 0.5W. I added a volume control that can change the output level and also gain control of the audio amplifier.



Fig 1. Complete audio amplifier using an LM386 IC chip

About the LM386 IC chip

According to the IC manufacturer's datasheet, the overview section explains that "This IC is a power amplifier designed for use in low voltage consumer applications, with a gain internally set to 20 for a voltage gain (=26 dB) to reduce the number of external components. However, if you want to increase the gain, by adding a resistor and a capacitor externally between pins 1 and 8 you can get a voltage gain of 20 and 200 (=46 dB).

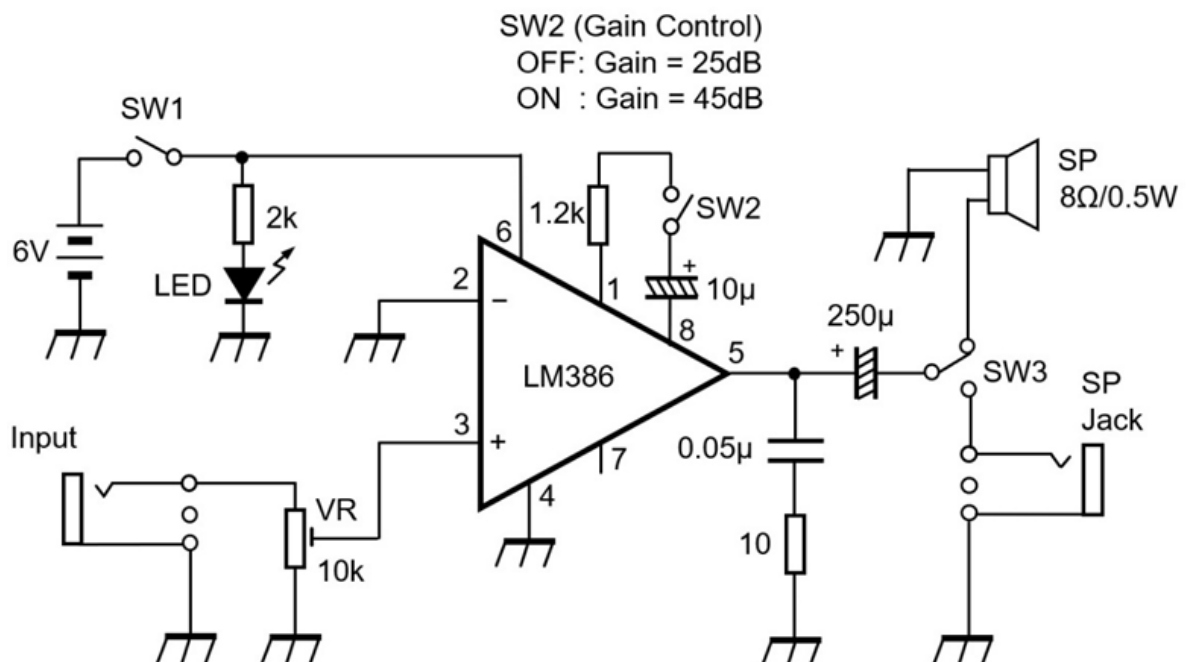
Audio Amp (cont.)

This time I added an option of 20 dB gain, selectable with a switch. My favorite specifications were the wide power range of 4V-12V, and the low current of 4mA. If this were true, it seemed that it can be driven by dry batteries. The power circuit could be omitted by driving with a dry battery. This could further reduce the number of parts. It also would have the advantage of not getting in the way by having an AC power cord in my narrow radio shack.

Schematic diagram of the audio amplifier

Figure 2 shows the schematic diagram of the audio amplifier. This schematic uses the basic circuitry described in the LM386 data sheet. As shown in the datasheet, you can increase the gain of the IC by installing an external resistor and capacitor between pin 1 and pin 8. In this circuit, the gain is selected by SW2.

Even though the IC is energy-saving, I wanted to reduce the current consumption as much as possible because this unit operates with dry cells. Therefore, a 2kΩ resistor was connected in series to the LED that lights up when the power switch (SW1) is turned ON. With this, the current flowing through the LED is more than 2mA, which is less than 1/5 of the rating. Even with this, you can see that the blue light emitting diode is sufficiently lit.



Audio Amp (cont.)

Operational check

Set SW2 to OFF (open state) and SW3 to the SP speaker side. Connect the earphone output of the radio to the audio input jack the audio amplifier. When SW1 is turned ON, audio is heard from the amplifier's built-in speaker. If sound is heard from the speaker, the check is complete for the time being.

Next, set SW2 to ON (closed state) while audio is coming out of the speaker. The gain switching circuit is operating normally if the audio level increases.

Checking the gain

The LM386 data sheet states that turning SW2 ON increases the gain by 20dB, so let us check it.

The confirmation was done with the WaveGene and WaveSpectra free software. WaveGene is an audio generator and WaveSpectra is an audio band spectrum analyzer. WaveGene generates a 1kHz sine wave. I observed the signal level when the signal was applied to the audio amplifier, and when it was not applied.

Figure 3 shows the level of the 1kHz sine wave generated by WaveGene and displayed by WaveSpectra. I do not know the absolute value of the input level, but that is OK because I only checked the amplification ratio of the audio amplifier. The graph shows that input level is -45 dB while the amplifier is turned OFF.

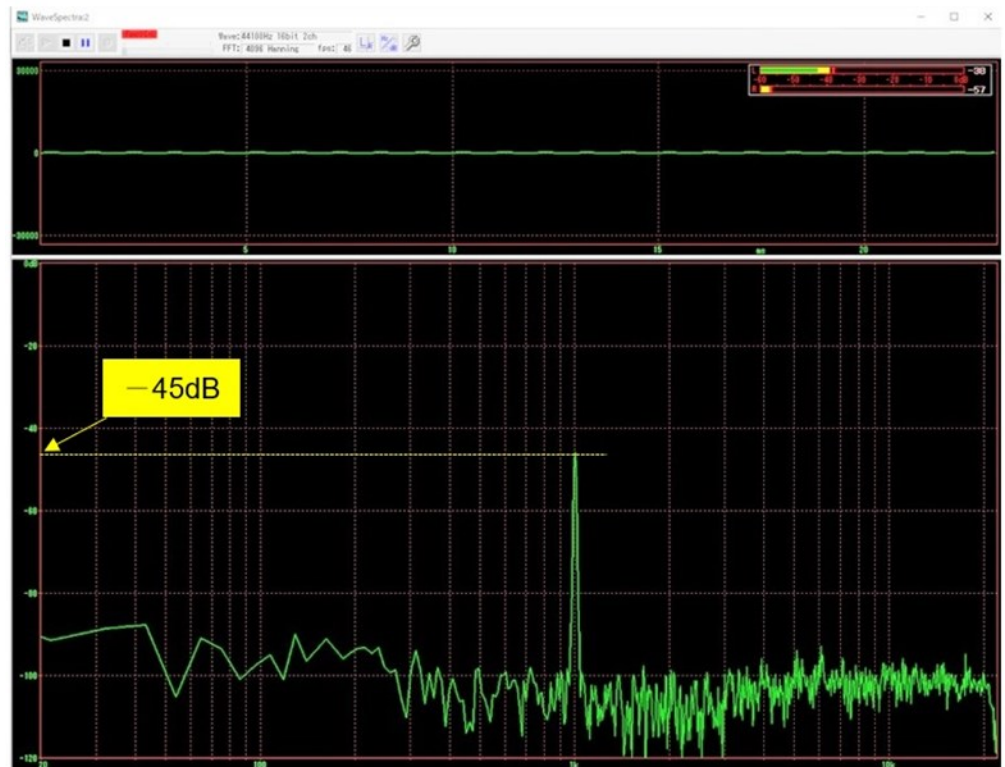


Figure 3. Signal level input to the audio amplifier

Audio Amp (cont.)

Next, I turned ON the audio amplifier, and observed the output level of the amplifier with WaveSpectra as well. The observed graph is shown in Figure 5. You can see that the output level is -20 dB. In other words, it can be seen that the difference between the level observed in Figure 3 and the level observed in Figure 4 is the gain of the audio amplifier.

$$A_v = |-45| - |-20| = 25 \text{ dB}$$

The LM386 datasheet states that "the gain is internally set to 20." Since this 20 means voltage gain, if I calculate it into dB, it becomes 26 dB. The datasheet describes voltage gain of 20 (=26 dB) but I observed a 25 dB difference in the graph. It is very close to 26 dB, so the gain of the audio amplifier is close to the datasheet value, and this is also OK.

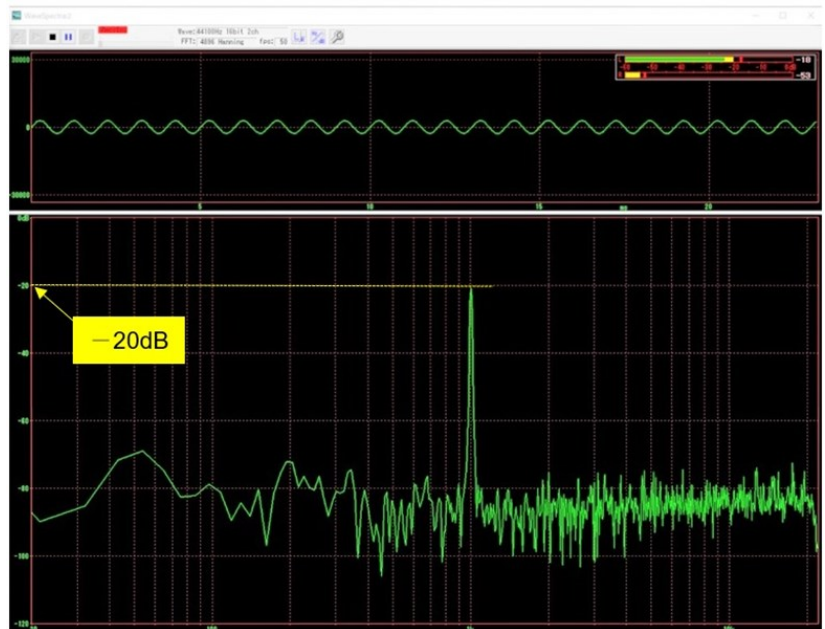


Figure 4. Audio amplifier output level (SW2: OFF)

I wanted to check the frequency response characteristics, but this time I made it just to listen to AM radio with speakers, so I will end the article here.

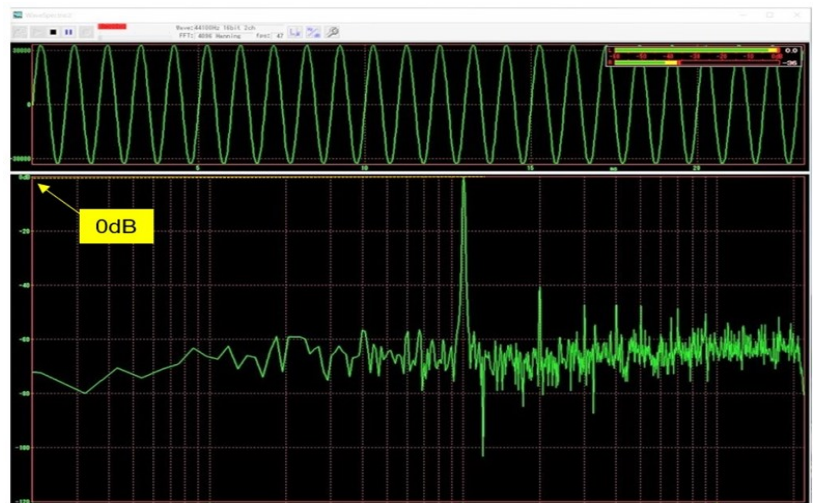


Figure 5. Audio amplifier output level with SW2 ON.

TX7W— Austral Islands DXpedition Trip Report

Operators: K5WE – Jeff Martin / W5CCP – Craig Boyer



Our journey to Raivavae, Austral Islands began from Tulsa, Oklahoma in the early morning of Sunday April 14, 2024. We flew from Tulsa to Houston to San Francisco and then on to Papette, Tahiti, French Polynesia, arriving late Sunday evening local time. We spent one night in Papette, and then flew approximately 500 more miles on Tahiti Air to the Austral Islands, first stopping at Tubuai, and then finally arriving at Raivavae in the late afternoon on Monday the 15th. Our host, Dennis, met us at the airport and we loaded our 14 bags of luggage into his truck for the 30 minute drive to Pension Raivavae Tama, a small bed-and-breakfast Inn located in the village of Anatonu on the north shore of the island. We arrived at the resort on Monday April 15 at about 5:30PM local time. That evening we began unloading and setup of radios and computers. Antenna work would have to wait until the next morning.

The Austral Islands are the southernmost group of islands in French Polynesia. The Australs, along with the Marquesas Islands, are considered separate DXCC entities due to their distance from the parent island of Tahiti. At the time of this DXpedition, the Austral Islands was ranked # 57 on the Clublog Most Wanted List.

On Tuesday the 16th we installed the Hexbeam and the DX Commander Vertical. The DX Commander had wire vertical antennas for 40, 30, 20, & 17 meters. Late Tuesday morning at 21:40Z, we made our first QSO with W6WDS on 10 meter FT8.



On Wednesday the 17th we installed the Crank-IR Vertical and the Buckmaster OCF Dipole which covered the 80, 40, 20, 17, 12, 10, & 6 meter bands. Our bungalows faced north, right on the beach. We ran the OCF dipole right along the beach, running East-West. It worked well for about a week. On Thursday and Friday we worked on installing the 160 meter antenna, first as a spiral wound vertical on a Spider pole mast. We never could get it to work. We tore it apart and tried it as an inverted V and still had trouble getting it to work.

TX7W— (cont.)

After spending several hours on 2 days in the tropical sun working on the 160 antenna we gave up on it. We would later use some of the wire to build a 10 meter dipole...

While working on the 160 antenna, I was stung on the hand by a red wasp. It was quite painful. It began swelling immediately. My young grandsons like to dress up and play in their super hero costumes. One of them especially likes the Incredible Hulk. I told them my hand looked like the padded incredible hulk hand of his costume. It was swollen for a couple of days, but by the third day was about back to normal...



Saturday April 20th was the first day of no antenna work. The WX had been hot all week. Saturday evening and night we had rain and thunderstorms.

Sunday morning I went outside to find the Crank-IR in pieces, laying across the street and in the yard. A guy rope had broken in the storm. We borrowed a hacksaw and cut off some damaged fiberglass pieces, then rebuilt and reinstalled the Crank-IR.

After the Saturday night storm, the weather turned cooler. It was cool, very pleasant, with a nice breeze every day until we left. It was hot again when we got back to the island of Tahiti.

We had band pass filters and stubs for most bands. They helped the inter-station interference a lot. When running FT8 or FT4 all stations would transmit on the first sequence, allowing us to have as many as 4 stations on the air at the same time, on different bands. Radios were a K3s, a Yaesu FT991d, and two Yaesu FT710 transceivers, all with 500 watt amplifiers. However, we found we had to limit output to about 200 watts or less per station to keep from tripping the AC breaker at the store across the street which fed our bungalows. Several times day & night we had to trek across the road to reset the tripped breaker...

On Monday Apr 22 we operated CW all day, putting about 1350 QSOs in the log. Craig & I both prefer CW. We also tried to get on SSB for several sessions, but these days if you want to make a lot of QSOs you have to work digital. Putting QSOs in the log was our priority...

TX7W— (cont.)

On Tuesday, Apr 23, we took a tour of the island. The road around the island is only about 15 miles long. Raivavae's population is about 950 people. Our host, Dennis, an American who came to Raivavae many years ago, said only about 2000 tourists visit the island annually. It's pretty isolated. There was a small grocery store across the road from our bungalows, the airport terminal building, some churches, a few government buildings, one restaurant, and homes scattered along the road around the island. There is no gas station on the island. They import gasoline and diesel fuel in 55 gallon drums, shipped from Tahiti.

On Thursday, Apr 25, we installed the driven element of a 2 element VDA - Vertical Dipole Array, for 12 meters. The following day I installed



the reflector element. This antenna consists of an aluminum tubing vertical dipole with a center feed point and a second slightly longer vertical dipole set 5.5 feet behind the driven element as a parasitic reflector. The antenna was pointed NE towards NA and EU. It was located about 15 feet from the water. It was one of our most effective antennas.

We had more than our share of antenna problems. High SWR on the OCF dipole began after the storm. We tried cleaning the connections, no help. SWR became so high on all bands it was unusable.

On the Hexbeam, the 15 meter wire element came loose. One of the insulator grommets had broken. We lowered the Hexbeam to fix. We discovered the 15 meter wire welded into the adjoining 12 meter wire. We repaired it and raised the Hexbeam back into position.

After about a week, we began showing high SWR on the 4 bands covered by the DX Commander. Following some troubleshooting, we removed all but the 40 meter radiator element. So, we ended up with a 40 meter wire vertical, a 10 meter dipole, the 2 element 12m VDA, the Crank-IR, and the Hexbeam...

TX7W— (cont.)

Wednesday May 1st was our departure day from Raivavae. Our Tahiti Air flight for Papette left about 9AM, arriving a few hours later. We rented a small van which was packed full with our luggage. We spent Wednesday night at the Airport Motel. Our overnight flight to San Francisco did not leave until 10PM so we drove around touring the island of Tahiti during the day Thursday.



We had set a goal of 40,000 QSOs. We exceeded that number with a total of over 55,000 after removing some dupes. We also wanted to see if we could put 4 stations on the air with two operators. We did have 4 stations on at times, at reduced power. We also desired a good distribution of QSOs to the 3 major population centers, NA, EU, and AS. That was accomplished.

For more info about the TX7W DXpedition see our website at: k5we.com/tx7w.

I'd like to thank all our corporate, club, and individual sponsors. Your support was fantastic and of great benefit to the DXpedition. Our sincere thanks to DX Engineering, Tennadyne, Cubex Quads, Oklahoma DX Association, Jake McClain Driver ARC, European DX Foundation, Mediterraneo DX Club, East Tennessee DX Association, Carolina DX Association, LA DX Group, Danish DX Group, Twin City DX Association, Clipperton DX Club, Willamette Valley DX Club, International DX Association, Chiltern DX Club, German DX Foundation, OHDXF Finland, Swiss DX Foundation, Kansas City DX Club, North-east Wisconsin DX Association and all the individual donors for your generous support. Your contributions are greatly appreciated by Jeff & Craig...

Also thanks to all the Deserving DXers out there who worked us. I hope we put on a good show. CU from the next one...

73 de Jeff – K5WE

TX7W Austral Islands Dxpediton

(Stats on next page)

TX7W– (cont.)

Continent	Total QSOs	%
Africa	213	0.4
Asia	16297	29.2
Europe	17669	31.7
North America	18666	33.5
Oceania	1393	2.5
South America	1487	2.7
Totals	55725	



QSOs by Continent

Band	FT8	CW	FT4	SSB	Total	%
80	13	0	0	0	13	0.0%
60	499	0	0	0	499	0.9%
40	2794	182	798	0	3774	6.8%
30	4574	316	1621	0	6511	11.7%
20	5057	532	2529	453	8571	15.4%
17	4775	507	2246	526	8054	14.5%
15	4545	1295	2979	534	9353	16.8%
12	6324	969	2143	1043	10479	18.8%
10	5079	1426	1140	826	8471	15.2%
Totals	33660	5227	13456	3382	55725	

TX7W Band/Mode QSOs

DX Dinner Tickets are now on Sale!

Support the club and enjoy great fellowship, topics, and food!

The guest speaker is none other than....

Just go to <https://swodxaevents.org/dinner-tickets/>

Japanese Castles on the Air— JACOTA

Greg Cook— J03SLK (kgregc1@mac.com)

I had a great call with Icom's Ray Novak, N9JA. Somehow we started talking about our newsletter and Ray suggested that I contact Greg, J03SLK. Greg has a series of articles describing his activations of Japanese Castles. I read the first several and knew that these would be great for our newsletter. Greg was kind enough to allow me to reprint these.

Thanks to Ray for the connection and for Greg for his permission to reprint. You can now watch the discussion about the Castles on the Air with Greg and the DX Mentor at (<https://youtu.be/HrhHDzzqCjM>)

Castle #7. Itokazu castle ...

A magloop antenna at an Okinawan castle

Hi, my name is Steve, JS6TMW. I was excited to learn about Japan Castles On The Air (JACOTA), from Greg, J03SLK, and his articles, and because of the recent interest here in outdoor radio activities like Summits On The Air (SOTA) and Parks On The Air (POTA). Greg asked me if I would like to introduce readers to a castle in Okinawa. There are at least 14 well-preserved castle sites in Okinawa, most are only ruins, but important relics of the Ryukyu Kingdom.

I have enjoyed SOTA for several years, but most of the designated SOTA summits are in the north of Okinawa Island, and many are on remote islands, so I keep going back to one that is only 9 kms from my house, which happens to be at an ancient castle ruin called Itokazu jo. Here is my article about operating with my homebrew magloop antenna at Itokazu castle in Naha.

The castle was built in the Gusuku (castle in Okinawan) period of Ryukyuan history in Nanzan, the Southern Okinawan kingdom. It was the home of the Aji of Tamagusuku Magiri. After it was conquered in 1429 by Shō Hashi, Nanzan and the two other kingdoms of Chuzan and Hokuzan were unified as the Ryukyu Kingdom, which was independent until incorporation into Japan in the Meiji era.



JACOTA (cont.)

The stone walls, ishigaki, are different from the ones at castles in the main Japan islands. The ishigaki walls of Itokazu castle were made with Ryūkyūan limestone in the mid-14th century. The site now is just a castle ruin.

For portable operation I use 5-watt CW radios built from kits to cover my favorite bands (40, 20, 17, and 15 meters), and have experimented with several homebrew antennas. My best antenna is a tall parallel vertical for 20/17/15 with elevated radials, all supported by a camp chair (my infamous Chairtenna). With a tiny 40 meter trap and sloping wire, I can operate on all four bands without any switching or tuning. The downside is that it takes about 15 minutes to set up, which sometimes results in tangled wires, and weighs about 7 kgs. with the chair. But it is a real DX-killer, not to mention very comfortable to operate in.

Last spring, I found a great YouTube video by California amateur K6ARK. Adam is famous in the SOTA community for inventing clever new portable antennas for HF and VHF. He demonstrated a multiband Small Transmitting Loop (STL or magloop) antenna that folds up for easy packing, and he recorded a QSO on 40M CW into Japan using only 5 watts. I had built magloops before and never had much success, but a lightweight loop that could be used in the field was so intriguing that I began to think I could build one to meet my needs. For my loop, I also used separate sections of flat aluminum bar stock, (15mm x 2mm) but only four lengths of 1 meter in order to reduce the number of contact points. I also made larger contact areas where the sections overlap, grinding off the tough anodized finish of the DIY-store aluminum and smearing a tiny bit of conductive grease.

After tightening the Nylok nuts I could not measure any resistance through the loop, but I could still easily fold the sections. When the joined sections are unfolded on the ground, I only tighten four wing nuts to assemble the whole antenna. I also made two additional sections so I can optionally enlarge the loop to 6 meters in circumference. This increases the (theoretical) efficiency on 40 meters from 13% to 34% with respect to a half wave dipole, resulting in around 4 dB higher signal strength.



Chairtenna with JH0WMN visiting after activating summits on outlying

JACOTA (cont.)

To resonate the loop on all the bands, I used a small 50pF air variable capacitor from my junk box, with additional 50pF silver mica caps switched in parallel as needed. The range of 100pF-150pF tunes 40M, while 50pF-100pF works on 20, and 0-50pF just hits 17 and 15 meters. I used a toroid with several taps on its winding for the common secondary coupling loop. The tap is changed with an alligator clip soldered to the coax. I found the optimum number of turns for each band by trial-and-error.

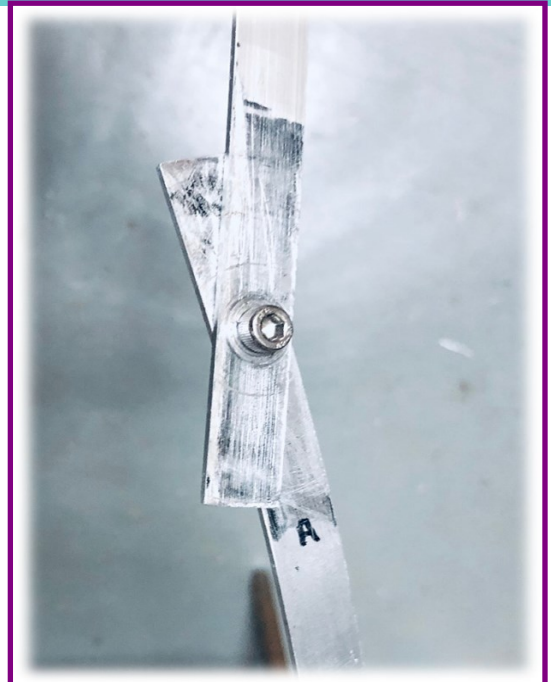
The entire antenna, including the 4-meter telescoping pole, extra loop pieces, coax, and ground stake, weighs only 1.35 kgs.



Tuning caps and toroids

If an STL is properly designed and constructed, it will have a very high Q and very narrow bandwidth, so it must be tuned accurately to get low SWR. I had to add a reduction drive to tune the capacitor easily. Initial tuning can be done by listening to signals or noise in the receiver, but an SWR indicator is needed to get a perfect match. Since neither of my QRP rigs have a built-in SWR meter, I adapted a

cheap SWR bridge by adding LED voltage indicators for forward and reflected power. While not as precise as a normal SWR meter, these show the sharp SWR dip as the reflected power LEDs extinguish and also show that the rig is putting out full power.



A joint connecting two of the antenna arms. The dark area is conductive grease.

L-R, extra 1-meter lengths, mounting stake, 4-meter fiberglass fishing pole, main 4-meter loop parts, tuning rod



JACOTA (cont.)

I actually finished this project in May of this year and tested it in my garden. I could hammer the mounting stake into the ground, stretch out the fishing pole, and assemble the loop in less than five minutes. Tuning took only a few more seconds, but I could not make many contacts using QRP because of the poor location. Then the weather turned hot and humid and stayed that way for months, and I did not have the energy to test it until this past Equinox weekend. (No mosquitoes!)

It was still hot and humid, but a big plus of this antenna is that it can be set up in places where my “Chairtenna” will not fit, in this case under some nice shade trees.



SWR bridge with LED indicators, and my 2 radios



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DX Engineering is a proud sponsor of major DXpeditions like W8S Swains Island 2023. Our active operators are dedicated to making ATNOs possible for hams around the globe. See you in the pileups!

JACOTA (cont.)



Assembling the loop antenna

My daughter and XYL accompanied me to Ito-kazu jo to help and to enjoy the late afternoon scenery. A family friend who lives nearby just happened to phone up and came over for a long chat, while daughter took photos.

I started out on 20 meters with a KD1JV Tribander, where a Taiwan and a mainland JA quickly answered my CQ, and then I fired up the QCX on 40 meters. Tuning was quick and easy again, and I made two more mainland contacts. A troupe of tourists came past while I was on the air and were surprised to hear Morse code, and see that our hobby still exists. By now we were in a bit of a hurry to get home, but I was very pleased that the first JACOTA trial went so well. I am looking forward to using it again at other JACOTA sites.

I especially enjoy building with recycled and bargain parts. I hope to write articles in the future, and hope you enjoy them.

This Week in Amateur Radio
North America's Premiere Amateur Radio News Magazine

**Stay on Top of all that is Happening in Amateur Radio
via a Podcast. A weekly Radio News Magazine**



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The Days aFter a DXPeDItion are usually a mix of excitement and tiredness. Your body is exhausted after being subjected to harsh and stressful conditions during the operation, but your mind is excited and wonder- ing where to go next. On the journey back from Bouvet, Mike Crown- over, AB5EB, started to wonder where we could go next. He had been in contact with Marco Quijada, CE1EW, who was known for his IOTA activations in Chile and was thinking about doing an IOTA activation in Patagonia. Mike thought that instead of doing an IOTA, it would be better to do a DXpedition to the Juan Fernández archipelago (CEØZ).

A New Destination

Previous DXpeditions to Juan Fernández had mostly operated from the town of San Juan Bautista. At that time Juan Fernández was in the 60s on Club Log's Most Wanted List. Marco had been to Juan Fernández 20 years earlier on a DXpedition and he present- ed the idea of a DXpedition from atop a mountain, instead of in town where we would be blocked by moun- tains. Both had considered Centinela Mountain, a 300-meter-high mountain in the eastern part of the island — where the Chilean Navy once operated a communication site — that would provide an unblocked radio path to all population centers of the world. We could expect to have good propagation with great views to all directions, and be away from the QRM in town.

CBØZA(cont.)

Mike and Marco began to assemble a team of operators from Chile and beyond, so when Mike approached me in May after the Dayton Hamvention, I immediately thought that this could be the next trip. Little did I know that a DXpedition to Juan Fernández would be a trip full with complicated logistics.



Greeting Guillermo (far right) at the airport.

Setback

After working with Marco on a daily basis to finalize the flight schedules, we received the tragic news one morning of Marco's sudden passing. He had suffered a major heart attack and went Silent Key at age 50. Although I didn't get the chance to meet him in person, I felt I knew him very well from our great relationship while organizing this DXpedition.

After a few days of mourning, the team discussed whether to cancel the trip or move forward. As Marco had been our lead contact and he had all the information about lodging, permits and most other logistical items, his passing left us with no leads. The team decided that we should continue with the operation, and, now, more than ever, to make sure that Marco's spirit could go on his last DXpedition.

Luckily, Marco had copied me on an email to Angela Garcia, Director of the Juan Fernández National Park. I contacted her to schedule a phone conversation and was then able to break the news of Marco's passing, and let her know that we were pushing forward. She was able to give me the contact information for Ramon Baeza from the hostel, and from there, all the other pieces fell into place.

The Team

Team members consisted of Ez Prado, HI3R/NK4DX; Mike, AB5EB; Otis, NP4G; "Papa" Mike Crownover, AD5A; Steve London, N2IC, and Hal Turley, W8HC. In early December 2023, we gathered at the home of Chuck Green, AD4ES, in Florida for a team meeting and to conduct some testing. During our testing, we weighed all our personal bags and auxiliary items such as coax, connectors and antennas. Afterwards, Ez was in charge of sending the CBØZA crate containing our non-electronic equipment via cargo to Santiago, Chile, and then onto Robinson Crusoe Island.

CB0ZA(cont.)

In Chile, Guillermo Guerra, XQ3SA (who had to drop out of the team due to work commitments), would receive the cargo. After it arrived in Chile and made it through Customs and Tax Compliance formalities, Guillermo picked it up in his truck and then met with Dercel, XQ3SK, who had sourced many other items in Santiago. Everything was then combined into the one crate for shipment to the island.

Because of the length of time it took for Customs to release the crate, we were left with the last available ship in Valparaiso that could get our supplies — fuel, tents, meals and good Chilean wine (to help us enjoy our time on the island) — to the island ahead of our arrival. Although our cargo arrived at Robinson Crusoe Island two days later, it sat in the harbor for several days. Our implanted Apple tracker confirmed our shipment's arrival, but windy conditions delayed offloading. Just two days before our scheduled departure to Chile, Don Ramon gave us visual confirmation that our items were in position. Talk about cutting it close!



A Snag

All flights from the US arrived in Santiago, where we were lucky to meet Guillermo as he, too, was arriving on a flight. After greeting each other, we learned that Papa Mike, AD5A, was held up in Immigration — detained because of an expired passport. It turned out that he mixed up his passports, leaving his current one at home in Texas. Nobody noticed until the Chilean Immigration Authority.

We tried the US embassy in Santiago for help, but no avail. So Mike flew back to San Antonio, Texas, picked up his current passport and returned to Chile — in time to make our flight to Juan Fernández. (Mike, AD5A, is the father of Mike, AB5EB, whom I already knew.



CBØZA(cont.)



Ez discovered an unused tower that the team was able to put into operation for the low

We originally referred to him kindly as “Papa” Mike. Well, after these events, we changed his nickname to “Passport” Mike, to which he objected, suggesting a more suitable nickname of “Non-Passport” Mike.) With the team all together again, we met Dercel at the terminal and we began the final leg of our CBØZA journey with a two-hour flight to Juan Fernández. After our arrival, we boarded a ferry for the hour-long trip to the eastern part of the island where Don Ramon welcomed us with a nice lunch, graciously prepared by his assistant, Betty.

Quick Deployment

We brought a next generation Rig-in-a-Box (NextGenRib), designed and built by Gregg Marco, W6IZT. This unit only needed a connection to an antenna and high-speed Internet. In less than two hours, Dercel, XQ3SK; Hal, W8HC, and Ez, HI3R, were able to get on the air from a small location in town. Our Spiderpoles were still being held in the warehouse, so we had to improvise. Ez sourced some used plumbing tubing that was lying around and built a multiband vertical antenna, and within two hours of arriving, CBØZEW was on the air. This was a special call sign in memory of Marco, CE1EW, to be used by the remote operators. Luckily, this radio was limited to only 100 Watts, so the radiating power was not strong enough to excite the remnants inside the used tubing and send a peculiar aroma into the air. We kindly referred to this as the “shitenna” – available soon on Ebay or at your favorite ham radio store. In the meantime, Otis, NP4G; Steve, N2IC; Mike, AB5EB, and Mike, AD5A, made the first trip up the mountain, a thrilling 45-minute drive, to get a preliminary look at our CBØZA operating area in the National Park and to discuss plans and preparations for the busy day to follow. The next morning the team went up to begin setting up two camps. The first, located in the main flat area, and the second, on higher ground on a slightly higher position overlooking the lower station. Around 1400 local time, Dercel, XQ3SK, had the honor of putting CBØZA on the air while more antenna building continued.

CB0ZA(cont.)

Once we had both stations up and running, we left three operators on site, while the rest went down to town to try to get a good night's sleep before beginning the next 24-hour operating shift.

That evening, we experienced very heavy winds, both in town and more so up on Centinela. We maintained sporadic communication with our teammates on the mountain as they reported excessive, sustained wind conditions that delivered a beating to our antennas — some were destroyed within a few hours of being erected. Around midnight, we lost Starlink connectivity and communication with our team.

At sunrise and before we embarked on the drive up the mountain, calls were made to the operating team, but we got no response. We had anticipated operating the ARRL DX Contest from atop Centinela, but the wind forecast for the weekend was predicted to be stronger than what we had just experienced!

Alternatives

Considering an alternative site for the contest, we asked Ramon about the possibility of deploying some antennas near his hotel. He started to think and told us that he had a better idea, as his property was not suitable for antennas. After Ramon made a phone call, we took a ride and met José at the aeronautical facilities near Fort Santa Barbara, overlooking the harbor at San Juan Bautista. Little did we know that José was a ham back in Santiago, with the call sign CE3DAC. He told us that previous DXpeditions to the island had operated from this area.

José gave us permission to set up our radio equipment and antennas near his facilities, and that evening we relocated our second station next to town. When we returned that evening to assemble the station, Ez noticed a big tower nearby and closely checked it out. He carefully examined every little aspect and realized it was insulated. His eyes brightened, thinking about the possibility of putting this tower on the air. We innocently asked José if it would be possible for us to use it — he agreed. The tower had been installed a few months earlier and was not yet in service.



DXers Have A Choice



The Daily DX - is a text DX bulletin that can be sent via email to your home or office Monday through Friday, and includes DX news, IOTA news, QSN reports, QSL information, a DX Calendar, propagation forecast and much, much more. With a subscription to The Daily DX, you will also receive DX news flashes and other interesting DX tidbits. *Subscriptions are \$49.00 for one year or \$28.00 for 6 mos.*

The Weekly DX - is a product of The Daily DX that can be sent weekly to your home or office via email in the form of a PDF (portable document format). It includes DX news, IOTA news, QSN reports, QSL information, a DX Calendar, propagation forecast and graphics. *Subscriptions are \$27.00 for one year.*

Get two weeks of The Daily DX or a sample of The Weekly DX free by sending a request to bernie@dailydx.com, or at <http://www.dailydx.com/trial.htm>.

CBØZA(cont.)

Ez smiled, as he dreamed how well our low band signals would be heard from this enormous antenna nested away in a remote South Pacific island. Ez quickly set about making a feed point junction to the tower and radial system. To his delight, he found that the antenna was resonant on the 80M band!

At the time, we had six stations on the air — two operating one of our Hex beams; the big tower in Santa Barbara using the call sign CBØZW; the RiB with the outstanding performer shittena, using the call sign CBØZEW from town, and two HF and one 6M station from the mountain. We had originally thought about saving the CBØZW for the contest, but the call sign needed to be different from CBØZA since it was not inside the National Park, the idea being to use it and keep it separate from the POTA station at the CBØZA mountain location.

Contesting

As we continued to operate and work as many stations as possible, the wind forecast for the contest weekend improved so we decided to do the ARRL DX CW contest from atop Centinela. Despite having access to a 50-meter commercial tower in town, conditions on the low bands were not as expected and proved to be more effective being away from the noisy, urban environment. Steve, N2IC, was in charge of our contest strategy, which worked out quite well for us. We ended up with 3,700 QSOs in our contest log, giving us second place honors for South America in the Multi-Single category. We believe we set a new Chilean M/S record for that contest as well — not too shabby for a DXpedition-style, generator-powered contest entry! We also found that being so far south made it very difficult for us on the low bands, but we had the best possible site and took advantage of working many multipliers.

ARRL OH Section Updates

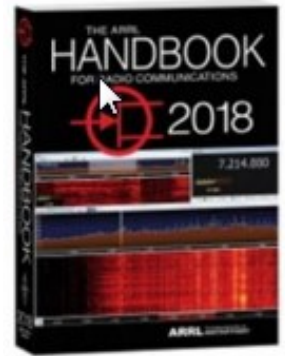
From our ARRL Section Manager,
Tom Sly, WB8LCD

Hey Gang, Do you get updates from your ARRL Ohio Section Manager via email? If not, go to: <http://arrl-ohio.org/handbook.html> and get registered.

What's the catch? I want to get everyone checking in to the Ohio Section website as often as possible, and in order to register each month, you have to visit the website often! There's nothing else to it. I pay all expenses, and from time to time, I Give Away more than just a Handbook. And, you'll never know just what months will be those special times that I will have more than just a Handbook to Give Away!!

Did you see the ad from ARRL recently? Well, they liked my idea so much that they've copied it. Yup, they were giving away a Handbook too!

Many of you ask me just how do I know when the drawing is on? Well, that's easy all you need to do is check in on the Ohio Section Website on a regular basis and watch for the big RED Arrow that will appear on the left side of the page. This is the sign that the drawing is on and you need to get registered. So, keep a sharp eye out on the website and check in often! <http://arrl-ohio.org>



CB0ZA(cont.)



Humanitarian efforts

As goodwill ambassadors for amateur radio, part of the objective of doing a DXpedition to a place where there is a local population is to be able to make an impact by supporting them. The Juan Fernández archipelago doesn't get as many tourists as it did before COVID. The people were very friendly and supportive to us, and we wanted to return their hospitality as a way of thanking them for the opportunity to visit.

We brought a 3D printer with us, assembled it and trained the Woman's Association how to use it. Knowing how hard it is to supply the island and get specific items, we believed that by having a 3D printer available might make it possible for the islanders to print parts in a couple of hours that, otherwise, might take weeks to get.

The National Forest Corporation (CONAF) manager Angela García informed us that the repeater used by the park service had not worked for the last two years. This same repeater site was used by the local fisherman's syndicate, and the Chilean Navy for its repeater network.

Angela had received some replacement parts for the repeater, but was waiting for a technician to do the installation. She asked for our expertise to help her inventory the parts so they could make sure that when the technician did arrive, he would be able to complete the project without further delay resulting from any missing components. We gladly agreed to help; she was the one who gave us the official permission to have fun and play radio on top of Centinela.

She asked if it were possible for us to visit the actual repeater site to perform a visual inspection of the system. When asked to be more specific, Angela said we would need to go to Cerro Alto on the north side of town where the repeater was located. Both Ez and Dercel jumped into it, thinking that rather than just making a list of items, it would be a greater service to the community if they were able to fix the repeaters.

CB0ZA(cont.)

The following morning at the port, the chief Navy officer, the head of the island's Fisherman Association, Angela and Ignacio from CONAF met team members Ez, HI3R, and Dercel, XQ3SA, with tools and supplies in tow.

After a 20-minute boat ride to the bottom of Cerro Alto, the highest mountain on the north shore of the island, the small work party ascended this very difficult peak, which required a 3½-hour climb to the summit, traversing sections with a difficult 20° incline.

Finally arriving at the top and able to catch their breath, they accessed the repeaters and evaluated all of the communication equipment to see if there was a chance of repairing and making at least one of the repeaters operational again. They had brought the replacement parts from CONAF and found some other supplies in the small repeater housing.

Ez and Dercel were able to repair the CONAF repeater and return it to operation. They were also able to repair the repeater used by the Fishermen's Association, making it operational for the first time in two years! Now, local fishermen can communicate with each other and with on-island stations whenever they are working out to sea.

Word spread quickly around the island that members of our team had electronic and technical expertise to fix and repair certain types of equipment. Then a representative of the hospital approached us, asking if we could evaluate some equipment that was out of service. Ez, HI3R, who happens to be a biomedical engineer, has a company that repairs medical equipment in Florida. We learned that the hospital had three broken autoclave units (sterilizers), and were limited to a single functioning unit.



Dercel completes the climb up Cerro Alto.



The team was able to repair the CONAF repeater on top of Cerro Alto: Cerro Centinela looms tall in the background.

CBØZA(cont.)

Ez quickly examined the units and successfully repaired two of them, along with giving a brief in-service presentation to hospital staff about proper equipment maintenance to extend the life of the equipment.

During our last day on the island as CBØZA was going QRT, we received a call from the local police department about their VHF radio system having a limited range. Upon inspection, we found that the power supply was not properly charging the batteries, having somehow been damaged. Fortunately, we had a “spare” 12V DC power supply, which our DXpedition graciously donated to the local policía.

Conclusion

Our operation continued with three to four operators on the mountain for 24-hour shifts. We paid attention to the low bands and tried to maximize the openings to Europe, Asia and North America, as we continued to push being on the air to maximize our efforts.

During our last day of operation, around 0400 local time, we crossed the 100,000 QSO goal. Little did we know that Marco had thought about possibly attaining 50,000 to 60,000 contacts, which we triumphantly surpassed! We are certain that Marco would have been very proud of our accomplishments — not only in terms of providing CBØZ to the DX community but also the positive impact our DXpedition made on the local Robinson Crusoe Island community. Marco’s last DXpedition was a complete success.

On our last evening on the island, we were treated to a wonderful Chilean asado (BBQ) with awesome Chilean wine and great company. We took time to celebrate our accomplishments and enjoy the great Juan Fernández hospitality.

I remember walking in town carrying a brightly-colored Pelican case when a local stopped and asked if I was one of the ham radio operators. To my surprise, he thanked me and said that no other visitors had made such important contributions to the local community!

CB0ZA(cont.)

Band	CW		Digital		Phone		All		Countries
	QSOs	%	QSOs	%	QSOs	%	QSOs	%	
160	70	0.1	1,227	1.1	0	0	1,297	1.2	61
80	490	0.5	3,597	3.4	0	0	4,087	3.8	82
40	3,064	2.9	7,769	7.3	512	0.5	11,345	10.6	108
20	3,159	3.0	10,304	9.6	1,936	1.8	15,399	14.4	126
15	4,235	4.0	8,941	8.4	1,766	1.7	14,942	14.0	125
10	5,031	4.7	12,239	11.4	3,580	3.3	20,850	19.5	136
30	1,462	1.4	6,061	5.7	0	0	7,523	7.0	101
17	2,258	2.1	10,939	10.2	1,395	1.3	14,592	13.6	118
12	2,977	2.8	9,754	9.1	1,344	1.3	14,075	13.2	117
60	0	0	1,001	0.9	0	0	1,001	0.9	54
6	46	0.0	1,754	1.6	31	0.0	1,835	1.7	56
All	22,792	21.3	73,586	68.8	10,564	9.9	106,946	100	

Continent	QSOs															
	160	80	40	20	15	10	30	17	12	60	6	All	%	CW	Digital	Phone
NA	731	1,841	3,600	4,429	6,441	6,933	1,866	4,354	4,345	487	741	35,768	33.4	11,551	18,708	5,509
SA	92	284	571	699	841	942	274	672	651	75	632	5,733	5.4	800	3,796	1,133
EU	330	1,362	2,653	5,246	5,264	11,082	1,610	4,433	6,181	429	272	38,862	36.3	7,189	28,493	3,180
AF	5	14	34	61	120	174	23	93	124	3	51	702	0.7	127	447	128
AS	133	532	4,249	4,726	2,141	1,691	3,558	4,863	2,729	1	136	24,759	23.2	2,929	21,259	571
OC	6	54	238	235	135	25	192	175	42	6		1,108	1.0	195	870	43

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SouthWest Ohio DX Association (SWODXA)

Club Fact Sheet

Who We Are: *SWODXA* is comprised of active DX'ers and contesters with a deep passion for all aspects of Amateur Radio. We welcome everyone who is interested in joining our club to please contact us. *SWODXA* members are active in all facets of DX and Contesting. We also travel to, and fund various DXpeditions all over the world. *SWODXA* sponsors the annual DX Dinner held on the Friday evening of Hamvention weekend in Dayton, Ohio. In addition, *SWODXA* members moderate the Hamvention DX Forum and host the *W8DXCC DX Convention*. *SWODXA* is proud sponsor of the prestigious *DXpedition of the Year Award*.

DX Donation Policy: The policy supports major DXpeditions that meet our requirements for financial sponsorship. Details are available on the website at: <https://www.swodxa.org/dxgrant-application/> and elsewhere in this newsletter

Club History: The Southwest Ohio DX Association (SWODXA) is one of the country's premier amateur radio clubs. Though loosely formed in mid-1977, the club had its first formal organizational meeting in August of 1981 where Frank Schwob, W8OK (sk), was elected our first President. While organized primarily as a DX club, SWODXA members are active in all aspects of our hobby.

Requirements for Membership: We welcome all hams who have an interest in DXing. It doesn't matter whether you're a newcomer, or an old-timer to DXing; everyone is welcome! Visit <http://swodxa.org/member.htm>

Meetings: The club meets on the second Thursday of each month at Hunter Pizzeria in Franklin, OH, and virtually via ZOOM. Members gather early in the private room for dinner and then a short business agenda at 6:30 PM, followed by a program. If you enjoy a night out on the town with friends, you'll enjoy this get together. Meeting attendance is NOT a requirement for membership.

Club Officers: Four presiding officers and the past president (or past VP) make up the Board of Directors. The current roster of officers are: Past President Tom Inglin, NR8Z, President Bill Salyers, AJ8B; Vice President Brian Bathe, AD8FD; Secretary Ken Allen, KB8KE, and Treasurer Mike Suhar, W8RKO.

Website: We maintain websites at www.swodxa.org and www.swodxaevents.org managed by Bill, AJ8B. These sites provide information about a variety of subjects related to the club and DXing.

SouthWest Ohio DX Association (SWODXA)

DX Donation Policy

The mission of SWODXA is to support DXing and major DXpeditions by providing funding. A funding request from the organizers of a planned DXpedition should be directed to the DX committee by filling out an online funding request.

(<https://www.swodxa.org/dx-grant-application/>)

The DX Grant committee will determine how well the DXpedition plans meet key considerations (see below). If the DX Grant committee recommends supporting the DXpedition in question, a recommended funding amount is determined based on the criteria below. The chairman of the committee will make a recommendation at the general meeting on the donation.

Factors Affecting a DXpedition Funding Request Approval

DXpedition destination	Website with logos of club sponsors
Ranking on the Clublog Most Wanted Survey	QSLs with logos of club sponsors
Online logs and pilot stations	Logistics and transportation costs
Number of operators and their credentials	Number of stations on the air
LoTW log submissions	Bands, modes and duration of operation

H40GC	H44GC	ZL9HR	XX9D	HK0NA	FT4TA
KH1/KH7Z	EP2A	FT5ZM	C21GC	VK9WA	NH8S
K4M	CY9C	VK9MA	PT0S	FT4JA	YJ0X
6O6O	VP6D	TO4E	XR0ZR	VP8STI	VP8SGI
W1AW/KH8	K1N	3D2C	VK0EK	S21ZBB	E30FB
ST0RY	TI9/3Z9DX	VK9MT	K5P	9U4M	TX3X
VU7AB	3Y0Z	3C0L	TX7EU	CE0Z	3C1L
TI9A	3D2CR	3B7A	K9W	VU7RI	6O7O
C21WW	CE0Z	T30GC	T30L	D68CCC	W8KKF/WP5
K5D	3Y0J	T33A	3Y0J	CY9C	