SOUTHEASTERN DX CLUB

Bulletin

DX CODE OF CONDUCT

April 2024

Founded In 1958

Our Next Meeting & Speaker

Date & Time:	April 18, 2024
Location:	Zoom meeting, 7:00 – 9:00 PM
Speaker:	John Rudi, NK7U
Topic:	Contest Stations and Baseball

From the Prez

(de John Tramontanis, N4TOL)

The Georgia QSO Party is upon us, and by the time you read this, the GQP will be going strong or in the books. Of course the GQP is co-sponsored by the Southeastern DX Club and the Southeast Contest Club and is one of the most active state QSO parties in the country. I hope you all make/made an effort to make the state of Georgia shine in this event. Our club also sponsors the Georgia Single-Op Mixed Mode Low Power award for this event.

Propagation and band conditions continue to be favorable. DXpeditions as VP6G and YJØVK are creating much activity this week. Things should heat up this month with the upcoming A52, Bhutan, operation which is scheduled to activate on April 18th. This one is ranked #31 most wanted on the Clublog list for North America East Coast. Also, KH9, Wake Island, is scheduled to be activated on April 15th and is ranked #34 most wanted on the Clublog list for North America East Coast.

The results of the 2023 DX Marathon have been posted, please see, https://dxmarathon.com/results/2023/

In the club competition, the Southeastern DX Club placed third world-wide, first in the US. This is quite an accomplishment considering our scores were measured against all DX focused clubs in the U.S.

Kudos to Andrew Goss, AA5JF, helped coordinate this effort and to all the club operators who submitted scores. Our margin over the 2nd place U.S. club was not that large, and this proves the point that all scores are important, both large and small.

Andy will give an update on the DX Marathon at our Zoom meeting in April.

INDEXA has created a fund, honoring Bob Allphin, K4UEE, to support young DXers. Your donations in his memory, noting that you are an SEDXC member, will be matched (% to be determined) by the SEDXC. Please see Jeff's, K1ZN, write up in this bulletin.

Atlanta Hamfest 2024 is scheduled for Saturday, June 1, 2024 at Jim Miller Park in Marietta. Hope to see you there. https://www.atlantaradioclub.org/atlanta-hamfestival.html

In memoriam: Larry Flegle, N4TMW

I recently did a search on QRZ.com to check on the status of an old friend, Larry Flegle, N4TMW. To my great dismay, I discovered Larry had become a Silent Key in December of 2019.

Larry was the president of the SEDXC from 1992-1993, and I served as his vice-president and subsequently became treasurer.

Larry worked for MCI at that time and our offices were located close by in Dunwoody. We shared many a lunch hour during those times. He was always a positive person and helped to get me involved in the club and DXing in my early ham years.

Larry had left the Atlanta area many years ago to move to Blairsville. Here is the link to his obituary.

https://union.fetchyournews.com/2019/12/15/larry-v-flegle-obituary/

April Zoom meeting, on Thursday, April 18th at 7:00 PM. I look forward to seeing you all then. This month, the SEDXC will welcome Joe Rudi, NK7U, as our guest speaker.

Here is the link for joining the Zoom event:

https://www.sedxc.org/sedxc/zoom/index.htm

73 John N4TOL

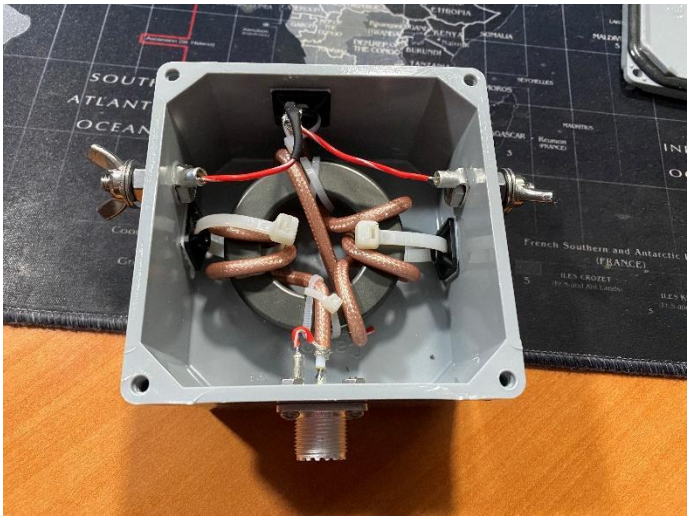
SEDXC Elmers Link

VP's Corner de K4NHW

(de Nathan Wood, K4NHW)

If you didn't get a chance to watch the eclipse on the 8th, you really missed an amazing spectacle. My 6-year-old son and I traveled to Carbondale Illinois and watched the eclipse in it's entirety. The total eclipse lasted 4 minutes and 7 seconds for us. It was quite the show.

For my April version of "What's on Your Desk?", I'd like to share a way to…. Build Better Baluns. I had a couple of baluns gifted to me when I first got into the hobby. After the case for one broke, I thought about rebuilding it. After my friend Gregg, W6IZT measured the impedance, it wasn't all that great! It only gave <900 ohms of choking impedance. Using 2000 ohms as a standard, it fell WAY short. We decided to build a BETTER balun! A PVC box, ferrite and some wires were all that was needed. Six turns on a FT240-31 core was the magic number for us. Below is what we put together.



The end result was >2000 ohms of choking impedance from 3.5 to 28 MHz. There were several lessons learned here. #1 was that you can MEASURE choking impedance. #2, you CAN make a better balun. Thanks to Gregg, W6IZT for heavy assistance with this project!

Presentations

Last month, the SEDXC welcomed Kyle, AAØZ, as our guest speaker! Kyle gave us an excellent introduction to Node Red and what it can do for your station. As mentioned in the presentation, it is strongly suggested that you find a way to install node red and play around with it. Once you do so, watch the presentation again. It will make TONS more sense once you get your hands on it! To watch the presentation again OR if you missed it live, you can check it out on the website at sedxc.org/zoom.

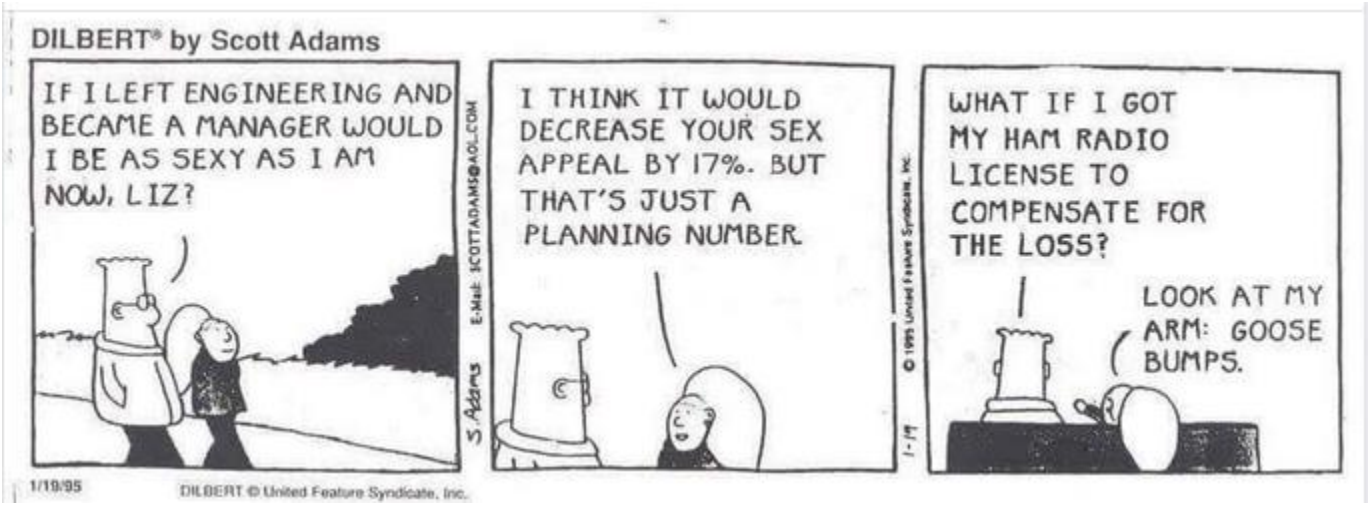
For April, you want to join us for yet another highly anticipated presentation. On April 18th at 7PM, Joe Rudi, NK7U, will be presenting about his former contest station and how he became involved in the hobby. Hopefully we will hear some stories from his 3X world champion baseball career as well!

Joe Rudi owned and operated an award-winning Multi-Op Contest station in Baker City, Oregon for over 45 years! Rudi is a former left fielder in Major League Baseball who played for the Kansas City & Oakland Athletics (1967–76, 1982), California Angels (1977–80) and Boston Red Sox (1981). In a 16-year career, Rudi was a .264 hitter with 179 home runs and 810 RBI in 1,547 games. He won American League Gold Gloves in 1974, 1975 and 1976, and played in the Major League Baseball All-Star Game in 1972, 1974 and 1975. Joe was also a World Series Champion 3 times from 1972 to 1974. Joe often found himself operating radio in between professional ball games with a long wire off the balcony of a hotel.

The zoom credentials can be found at the top of the front page of sedxc.org.

March Humor

De Neil Foster – N4FN



Treasurer's Journal *(de Jeff Cantor, K1ZN)*

Greetings, Fellow DXers!

TREASURER's Report – April 2024

- Checkbook Balance on April 1st: $12,745.23
- Payments Made, month of March 2024: NONE

SEDXC received one request for funding this past month. Murray Adams, WA4DAN, on behalf of a team proposing to activate St. Paul Island under the call sign, CY9C, August 26th to September 5, 2024.

The particulars for this activation are:

Dates: August 26 to September 5, 2024

11 Seasoned DXPeditioners including Glen Johnson, WØGJ; Larry Menzel, WØPR; Pat Dolan, N2EIN; Lou Dietrich, N2TU; Dan Sullivan, W4DKS; Craig Thompson, K9CT; etc.

No permit in hand presently, but says Canada will issue 90 days prior to event

Last activation 2019

Most Wanted Globally #51 East Coast NA #123 (not very high)

Flex Radios & QRO / Good antenna configurations

Membership Needs: sample of 25 in ClubLeagues –

- ATNO = 10 (40%)
- Has 1 or 2 bands – 2
- Can use band fills = 12

As we move closer to the end of our fiscal year 2024, I need to highlight a few things:

1. **I have now served a decade as your Treasurer, and it has been an honor to do so. This past June I agreed to stay in office one additional year with the proviso that a new person come forward to "understudy" the SEDXC bookkeeping process and DXpedition funding application vetting process, etc., so as to make for a seam-**

less transition to a new officer. I call for a volunteer to come forward and begin that understudy.

2. **Likewise, our WebMaster has asked for a volunteer to begin that understudy. Please, SEDXC members, we ask for the next generation of officers to step forward.**

73s & GUD DX,
Jeff / K1ZN, Treasurer

Southeastern DX Club and International DX Association Join Together

in rolling out a DXPedition fund with the objective of supporting DXPeditions that include licensed Amateurs under the age of 35. K4UEE encouraged elmering of young DXers to ensure that this aspect of our hobby would live on into future generations. As such, in his memory INDEXA has created a fund specifically to support such DXPedition groups. SEDXC encourages its members to give individually to seed this fund. SEDXC will match (percentage to be determined in the 2024-2025 budget) individual member contributions after the first full year of giving. To make your contribution make your check payable to INDEXA & mail to:

International DX Association
2309 Lincoln Avenue
Saint Albans WV 25177 USA

Or go to www.INDEXA.org & click on the join/donate button and complete the online donation form. In all instances please indicate that the donation is for the K4UEE Fund & that you are a SEDXC member. Thank you!

Around The Shack *(de Hal Kennedy N4GG)*

Around the Shack

April 2024

By Hal Kennedy

Missed DX: The Mother of Invention

There are 340 countries (aka “entities”) on the DXCC list. I have 338 confirmed; I am missing two to have them all. My all-time results are 357 confirmed - this includes deleted countries. If you don't chase DX, a deleted country is one that once existed but no longer does, often due to geopolitics. As an example, when Czechoslovakia split into the Czech Republic and Slovakia, Czechoslovakia was deleted and the Czech Republic and Slovakia were added to the list as “new ones.”

Which two am I missing?

I’m missing North Korea (P5) and Scarborough Reef (BS7H).

When you are an avid DXer you track expeditions to the places you need, particularly the ones you suspect you might hear once in a lifetime. Sometimes you get the contact, sometimes you don't. When you are near the top of the DXCC honor roll, each missed opportunity comes with a story. My Scarborough Reef story is straightforward. I was vacationing in Croatia when the expedition was on the air. I was away from my rig at the critical time.

From the U.S. East Coast, Scarborough was a difficult QSO to make. The pileups were ferocious. For me however, the details don't matter nor does the probability of getting the contact if I had been home. *I wasn’t home.* That should be the end of the story, BUT, my linear amplifier did get a QSO. Ralph, K1ZZI, was having amplifier woes as I left for Croatia. I loaned him my ACOM 2000A and wished him good luck. With operating skill, good antennas and good luck, Ralph and my amplifier got a QSO. Although ennui-inducing, I have to agree that my amplifier contacting Scarborough Reef shouldn't count for my DXCC.

My P5 miss is a better story. "Better" as in cringeworthy. I *was* home, living in Maryland in 2001-2002 when Ed Giorgadaze, 4L4FN, operated from North Korea as P5/4L4FN. Ed managed 16,000 QSOs using only a barefoot IC-706 before being unceremoniously ordered off the air with explicit instructions to remove everything he'd brought into the country.

I heard Ed in the noise a few times, but propagation wasn't good and my antennas were HOA-level poor. Ed's antennas, also not good, were communist-dictatorship-level poor. [No, I am not comparing my HOA to a communist dictatorship] The majority of Ed's operation was on 15 meter SSB and RTTY. I was last set up for RTTY in 1966.

In the early 2000s (seems like yesterday) cell-phone texting had not yet arrived. Local communication among DXers was via two-meter FM. In some areas the "DX net" was simplex, in other areas it was via repeater. Prior to FM, DX tips were passed on two-meter AM. The rig of choice was the Gonset Communicator, affectionatly known as a "Gooney Box."

Although cell phones were not yet a thing, DX spots *were* being exchanged in text format via VHF telenet, usually at 1200 baud and usually on two meters on a frequency above the technician-class band allocation (145-147 MHz). Telnet moved from VHF to the internet as time went by, but the format for spots, even today, is as it was in the VHF days. There was and is a chat function too.

When the P5 became active I lived in PVRC territory. The PVRC had an excellent 1200 baud two-meter telnet DX network. I was usually logged in and monitoring. With one exception, the few times I heard P5/4L4FN were thanks to spots on the PVRC's VHF telnet system. That exception is the basis for this story.

When chasing rare DX, there is nothing more valuable than good friends. One afternoon, *via telnet chat*, a friend texted: "The P5 is coming up in ten minutes on 21,375, I'll plug you in. **!!!!!DON'T SPOT THIS!!!!!**" I agreed of course and waited as instructed on 21,375, away from listening ears. Ed's typical operating frequency was 21,225 (listening up). Sure enough, at the

appointed time, there was P5/4L4FN. He was Q4-5, S3 - the best I'd ever heard him. My benefactor had a quick QSO with Ed then told him to stand by for N4GG. I could not believe my luck. I had the P5 all to myself, on a clear frequency, and he had been fed my call. It doesn't get any better.

I called – no answer. "Try again" said my friend. I heard the P5 say "I can't hear him." I called again. "I can't hear him." My friend tried four times to get Ed to listen carefully for N4GG. On three of the four tries "I can't hear him" came back. On the fourth try "I can't hear him, I have to QRT" came back. The end. No QSO.

Another station active on 15 meters at that time was 3W1LWS in Vietnam. I tried working him for weeks, in vain, leading up to my P5 disappointment. That was it – necessity is the mother of invention. My 40 meter sloping dipole wasn't cutting it on 15 meters. It was time to invent an HOA-acceptable (read: stealthy) antenna with decent gain at a low take-off angle toward Asia.

That motivation led to what became known as the "N4GG Array." I made the first one by bending the outer ¼ wavelength (as measured on 21 MHz) ends of my existing 40-meter dipole from horizontal to vertical. It took less than an hour to do, which was good since there was DX to work!

The N4GG Array design was the product of expedience as much as insight. Dipoles close to the ground radiate at high take-off angles. For DXing I needed a low take-off angle antenna - most easily accomplished with a vertical and vertical polarization. The obvious choice for that was a ground-mounted vertical (which wasn't going to be stealthy enough) and radials (for which I didn't have room).

So, the DX antenna of choice at N4GG became the N4GG Array. Results exceeded expectations. The antenna worked well enough that I later built a tri-band version.

An N4GG Array can be built for any band – it's simply a 3/2 wavelength horizontal dipole with the outer ¼ wavelength made vertical. I described it in an article published in QST in July, 2002. The article won the cover plaque award that month. Figure 1 is from the article. It shows a tri-band N4GG Array with the elements nested as they would be in a fan dipole.

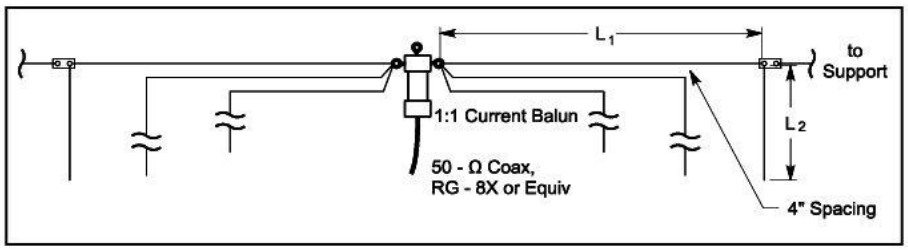


Figure 1. The tri-band N4GG Array described in QST, July, 2002. Each band is a ¾ wavelength dipole with the outer ¼ wavelength vertical.

After working lots of Asiatic DX, I eventually got around to modeling the antenna. Antenna radiation occurs due to current flow. Current maxima occurs twice on each side of a 3/2 wavelength dipole (e.g., a 40 meter dipole on 15 meters). See Figure 2. Bending the ends of a 3/2 wavelength dipole from horizontal to vertical moves a lot (but not all) of the current into the vertical elements. That brings the antenna's effective take-off angle down.

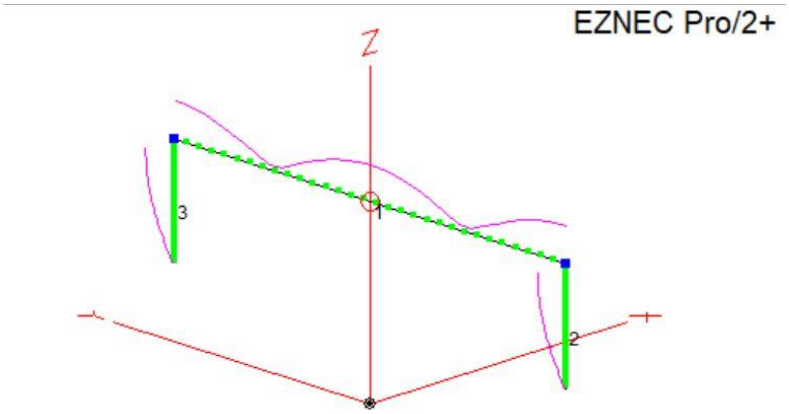


Figure 2. Current flow in an N4GG Array (red line). Current maxima occur on both the vertical and horizontal elements of the antenna.

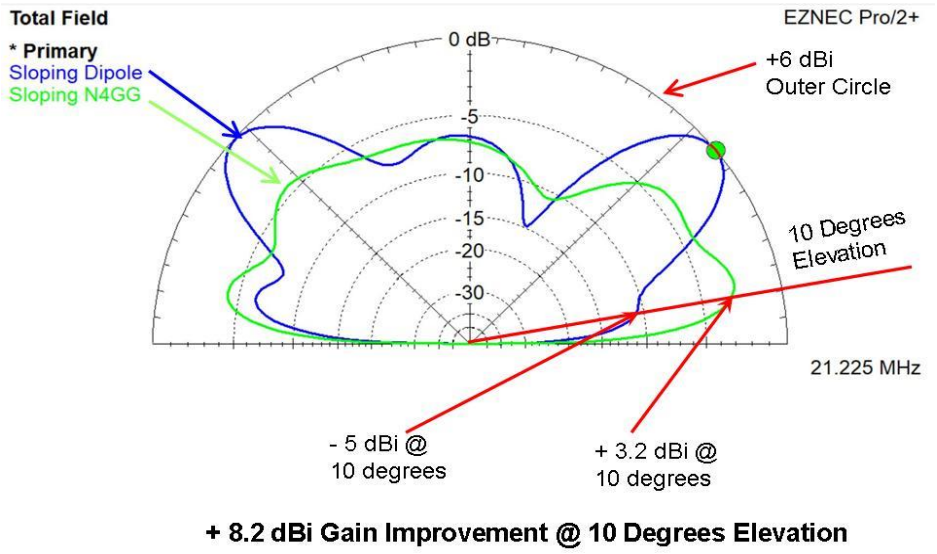


Figure 3. The elevation pattern for a ¾ wavelength sloping dipole vs. a sloping N4GG Array. The N4GG Array has an 8.2 dBi gain advantage at 10 degrees elevation angle.

The elevation radiation patterns for a sloping dipole and a sloping N4GG Array are shown in Figure 3. Per the model, the N4GG Array has about 8.2 dBi gain advantage over the dipole at 10 degrees elevation angle. 8.2 dBi is a lot! Ten degrees was selected as the angle for comparison based on results from the HFTA program (included with the ARRL Antenna Handbook) which indicate 95% of Asia signals arrive at Maryland at 10 degrees elevation or less.

Performance statements are always subjective. I got a 579 from 3W1LWS the next time I ran across him on the air. Lots of Asia QSOs went into the log. Bending the ends of a 3/2 wavelength dipole downward does, in fact, lower the take-off angle and improve one's chances of working rare DX. It addition to lowering the take-off angle, the model indicates an N4GG Array is quieter than a dipole – something I have confirmed on the air. The large lobes the dipole exhibits at 40 degrees elevation (see Figure 3) are significantly reduced – along with the noise

that comes in at higher elevation angles. Try an N4GG Array for yourself to turn a cloud warmer into a quiet DX antenna.

I'd like to comment on the name this antenna become known by - the “N4GG Array.” I don't care for the name. I was pressed for time as the QST publication date loomed and that's what I came up with.

I'm content with calling it an array. The vertical portions are top fed verticals spaced a wavelength apart, fed 180 degrees out of phase – that's a two element vertical array. Adding my callsign to it? That's the part I regret. It seems presumptuous. Yes I did come up with the design but I don't think it's as important, nor innovative, nor original as antennas like the G5RV, the W8JK Yagi feed or the K9AY receiving loop.

Meanwhile, referring to the antenna as a “3/2 wavelength, ends bent down, top fed pair of verticals spaced a wavelength apart, fed 180 degrees of phase” isn't tenable. If nothing else, “N4GG Array” is easy to say and it's surprising to me how well recognized the antenna continues to be 22 years after the QST article appeared. If my callsign was not part of the name that might not be the case – I don't know.

QST articles, this column, my book and other things I've written occasionally generate more interest than expected. The N4GG Array is one of those things. Questions and comments arrive via email, year after year. Apparently there are a lot of them on the air. My callsign is sometimes recognized on the air, eliciting the question: “Are you using an N4GG Array?” I answer honestly: “No, I haven't had one on the air since 2010.” It's a little embarrassing. Doubly so when the guy on the other end *is* using one!

73,

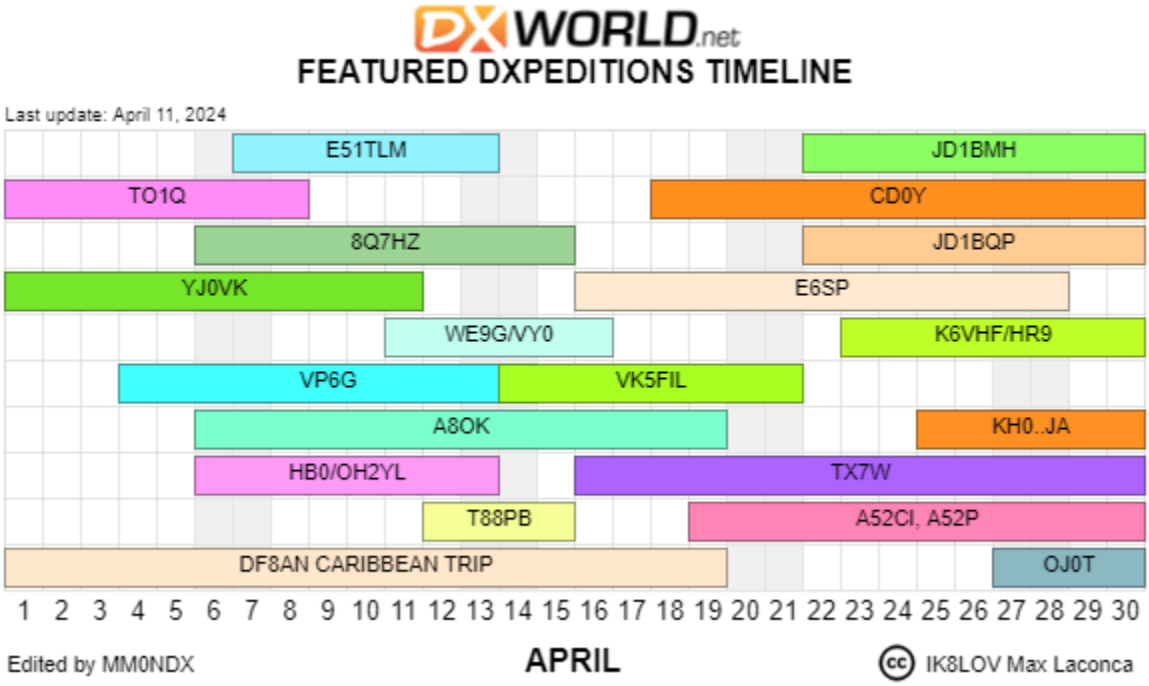
Hal N4GG/4

25 Years Ago… *(de Van Herridge, N4VGE, Bulletin Editor)*

Greetings from the Editor. Check SEDXC's website to see the latest club information. www.sedxc.org .

See link below for the SEDXC Bulletin from 25 years ago.
sedxc.org/sedxc/bulletins/sedxc0499.pdf

The *DX World* Calendar/Timeline for April



The *DX World* Calendar features a timeline of all DXpeditions anticipated for the current month and is a great way to plan your chase for the next, All-Time New One (ATNO). The Calendar is updated regularly; use this link to see the latest version:
https://www.hamradiotimeline.com/timeline/dxw_timeline_1_1.php

SEDXC Officers & Positions

John Tramontanis, N4TOL – President – iam4rb@gmail.com
Nathan Wood, K4NHW – Vice President -- nathan.wood23@gmail.com
Joel Levine, WA4HNL – Secretary -- jlevine@bellsouth.net
Jeff Cantor, K1ZN – Treasurer -- jacantor9@gmail.com
Verne Fowler, W8BLA – Activities Manager -- w8bla@arrl.net

SEDXC Appointed Positions

Chaz Cone, W4GKF – Webmaster – w4gkf@chazcone.com
Van Herridge, N4VGE – *SEDXC Bulletin* Editor – vanherridge@gmail.com

Fill out the form completely and send it to:

Treasurer.SEDXC@Gmail.com

Entity Name / Call Sign	CY9C
Date of Application	March 1, 2024
Approx. Date and duration of Dxpedition	August 26 to September 5, 2024
Web page	Cy9c.net
Team leader / number of members:	Murray Adams, WA4DAN
List name & call of each team member	Glenn Johnson, WØGJ, Larry Menzel, WØPR, Pat Dolan, N2EIN, Lou Dietrich, N2TU, Lee Imber, WW2DX, Dan Sullivan, W4DKS, Jay Sough, K4ZLE, Craig Thompson, K9CT and Mike Tessmer, K9NW
List DXPeditions that each team member above took part in	Murray Adams, WA4DAN - Team Leader. Murray has five previous DXpeditions to St. Paul Island as well as DXpeditions to Navassa, Desecheo, Mellish Reef, Sable Island and many IOTA operations. Glenn Johnson, WØGJ. Glenn is a DX Hall of Fame member with many top ten DXpeditions and was part of last year's CYØS team. Larry Menzel, WØPR. Larry is an experienced contester and DXer on his first DXpedition after 44 years in ham radio. Pat Dolan, N2IEN. Pat has participated in many DX operations as well as CY9C in 2016 and 2019. Lou Dietrich, N2TU. Lou has been team leader and participated in a number of Pacific DXpeditions including Swains Island, Wake Island, Palmyra and was on the CYØS team last year.

	Lee Imber, WW2DX. Lee has participated in many DX operations as well as CY9C in 2016 and 2019. Lee was on the CYØS team last year. His interest is EME and satellite. Dan Sullivan, W4DKS. Dan has been on many DX operations including CY9C in 2019 and is an IOTA checkpoint in the US. Dan was on the CYØS team last year. Jay Slough, K4ZLE. Jay has operated from over 40 DXCC entities and needs no introduction! Jay was on the CYØS team last year. Craig Thompson, K9CT. Craig has been a team member and leader for several DXpeditions and is a member of the CQ Contest Hall of fame. Mike Tessmer, K9NW. Mike has participated in many DXpeditions including K9W, Wake Island, K5P, Palmyra Atoll and VP6R, Pitcairn.
QSL manager / QSL route	WA4DAN, wa4dan@geeksnet.com (direct) OQRS will be handled by K5DHY LoTW uploads within 30 days of the end of the DXpedition
Funding amount requested – please attach budget & show team's contribution	We appreciate any assistance you're willing to provide. The team is totally responsible for all expenses. We've received a substantial grant from the NCDXF. Our overall budget is projected to be $85,000. If more definitive information is required, please let me know.
Send Funds to:	Direct to: Bill, K5DHY via QRZ address Bank Routing: 111900785 Account Number 0327265757 Via PayPal Friends and Family: cy9dxpd@gmail.com
Position on most wanted list – both global & North America – East Coast	Global: 52 (since CEØZ has concluded) NA-EC:
Landing permit/operating permission ap-	Canadian Parks will issue the permit in June. They won't issue permits before 90 days, but given our history (CY9 and CYØ) no problems are

proved (attach copy).	anticpated. We have been give verbal approval.
Overview of antennas & equipment to be taken on DXPedition	Expedition will by using exclusively FlexRadio Systems radios, Maestros and amplifiers. Antennas will be Yagi beams for 10-30, verticals and wire for the low bands and Yagi's for satellite and EME
Last time(s) this entity was activated	2019
Typical interval between activations	Not sure, but looks like about 5 years
Method of transportation to DXPedition site	Team members will make their way to Dingwall, NS. We have two helicopters booked, one heavy for equipment and one smaller one for personnel transport.
Your team's objective / strategy including social objective	We hope to make 50-70,000 Qs while on the island. We will attempt to follow propagation with special emphasis on parts of the world that have a more difficult path.
Callsign/Age of youngest Team member	WW2DX, Lee Imber. A lad of 50 years.
SEDXC member initiating request	Bob, K4UEE, has always been our sponsor for SEDXC. He will be sorely missed.
SEDXC member(s) participating, if any	
SEDXC logo on QSL card & web page?	Yes, Of course.
Additional comments: This will be one of the more expensive trips to CY9 given that we'll require two helicopter rides back and forth. Also, as there are no amenities, just a rock in the ocean, we will be tenting and working from tents during the entire expedition. The quality and experience of this team assures a successful outcome, mother nature willing, of course. Band conditions should be the best in years and we're looking for a very successful outcome. Thanks to generous clubs and individuals, we hope to support it entirely, but ultimately, the team is responsible for all expenses.	

Internal Use

Date published in the newsletter	
Review/analysis of SEDXC Club Leagues member sample (N=)	ATNO: Band Fills:
Results of member review at the meeting: (approved / disapproved) Recommendation $_____	 Recommended $_____
Funds disbursed on date:	
Funds disbursed by:	