The LongPath

November 2022 — Volume 46 Issue 11 A North Alabama DX Club Publication

Contents:

Contributors:
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From the President

By Bob De Pierre, K8KI

Several important topics this month: AG4W on Dxpedition in Djibouti right now, DXer of the Year voting, the DX Christmas party, club officer voting this month, the club picnic last weekend, and what's happening at the museum.

As I write this, our Steve/AG4W is spending the week out in the desert of Djibouti as J28MD (J28MD website). He's been writing me every day. I think he's too overwhelmed to decide if he's having any fun. They're keeping him busy and sleepless. He reports that he had a pileup working EME yesterday! How would you like an EME QSL from Djibouti!! Actually, this week appears to be the first week of Dxpeditions in three years. We've had a very long drought. Other call signs I see today are 3C3CA, 5V7RU, P29RO, VK9CM, 4S7AB, FW1JG, and VR25XMT. We can report on them at the next meeting.

This month we'll vote for DXer of the Year. For the first time in three years, this one really means something.

I had to make a tough decision on the Christmas party and will need some support. Barry Johnson was kind enough to make reservations at a great upscale restaurant for the party. We'll have it at Amerigo, which is on the Parkway near Weatherly. They can give us a private room. I have heard nothing but rave reviews on it. The problem is that we need at least 25 people to attend to meet their minimum threshold ($1,000). I'll describe this at the meeting and send around a sign-up list.

November is the month we vote for club officers for 2023. I set up a committee to find candidates two months ago, and they have been unable to recruit a full slate of officers. I can't tell you how sad that makes me feel. If we don't have a slate to vote on by our November meeting, what happens then? Do we continue to have meetings? Leaderless meetings are just out of the question. If no one is responsible and in charge, then the meetings must go away. We'll find out on Tuesday. Either way, I'm very sad it has turned out this way.

We had a successful club picnic at the Monte Sano State Park on Sunday. The weather could have been a lot better, though. It rained most of the time, and was chilly, but we had a roof and a ton of great food, and everyone did bring swell food. There were 24 folks who showed up despite the inclement weather. I got to chat with folks I didn't know well and learned about their interests in ham radio and DXing.

From the President (continued)

You may have noticed that the four months of renovation inside the museum is now complete. It's finally starting to take shape as a real museum. We're at a turning point. You can see that there remains a lot of work to turn the place into a real museum. I can't tell you how lucky we are to have crossed paths with Dr. Marc Bendickson when we did. A year ago, we were emerging from two long years of plague and had no place to conduct our meetings. The environment at the Museum of Information Explosion is, by far, the greatest place in the world for us. This is a multi-million dollar facility and we are surrounded by some of the greatest pieces of history I could ever imagine. And we haven't been charged a penny for it. This is just too good.

With the real work now beginning, it is time for a little payback from us in terms of volunteer work. I think I know everyone who has ever come to a DX Club meeting. And I know every one of us has a lot of skill to offer in turning the MIE into a great place for many other people to visit. There is a story to tell, and each of us has a piece of that story. It matters not if you don't have a technical background. We have too many problems to solve. Volunteers just need to see a problem and figure out how to solve it. The museum needs docents (story tellers), exhibit designers/imaginers, writers, carpenters, and lifters. I'm finding that all this will take some kind of scheduling. Marc now needs help on a daily basis.

I've been asked numerous times about the master plan for the museum, when it will be financially self-sufficient, and will there ever be enough employees and volunteers to successfully pull it all off. Marc realizes this, likely a lot more than any of us hams, and has asked if he can do the program for us on Tuesday. So come loaded with questions for him at our next meeting on Tuesday, November 8, at 6:30 pm. The Zoom sign-on is unchanged.

The Museum of Information Explosion

Joseph Henry's Wireless Inventions

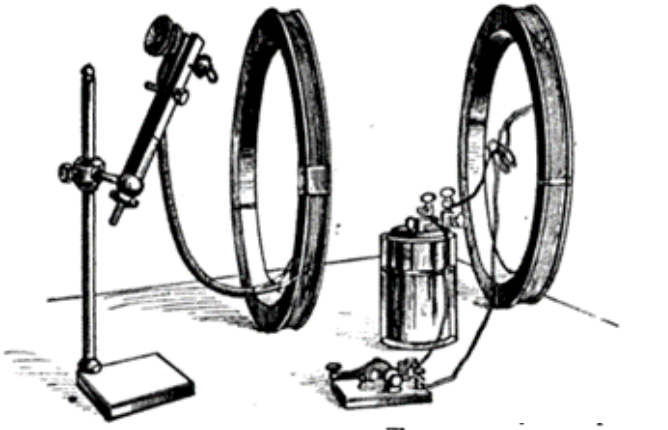
By Hans Schantz, KC5VLD

(Excerpted from KC5VLD's forthcoming book, *Fields & Energy: How Electromagnetism and Quantum Mechanics Work and Where Physics Went Wrong*.)

There are several contenders for the honor of inventing the first wireless radio-frequency communications devices. "The attraction and repulsion of electricity, like those of magnetism, act at great distances," the American scientist and first director of the Smithsonian Institute, Professor Joseph Henry (1797–1878) affirmed in 1859.[i] Henry made some of the first experiments with inductive signaling. In one experiment, he placed a 5 ½ ft diameter coil 7 ft away from a 4 ft diameter coil. When contact was made and broken with an eight-cell battery (probably ~12 V), shocks were detectable by placing the terminal wires of the second loop on one's tongue.[ii]

Joseph Henry's Wireless Inventions (continued)

In 1842, Henry demonstrated electrostatic induction at a distance, proving that a charged plate on the second floor of his Princeton house could induce sparks from a plate in his basement. The figure shows a typical wireless inductive telegraph capable of short-range communications and Henry's 1842 experiment.



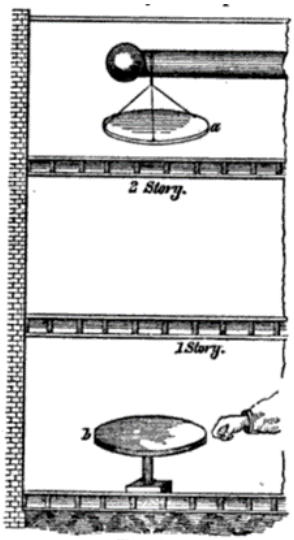


Figure: Inductive wireless telegraphy hardware, [iii] above, and Joseph Henry's 1842 induction at a distance experiment, [iv] right.

Henry may also be responsible for the first identification of alternating current.[v]

> *The discharge, whatever may be its nature, is not correctly represented (employing for simplicity the theory of Franklin) by the single transfer of an imponderable fluid from one side of the jar to the other ; the phenomenon requires us to admit the existence of a principal discharge in one direction and then several reflex actions backward and forward, each more feeble than the preceding, until equilibrium is attained.*

This oscillatory resonance behavior is now a well-understood aspect of reactive circuits. Energy transforms back and forth between electric and magnetic forms multiple times, each time losing a bit of the energy to the resistive losses in the discharge. Such "damped resonant" circuits were what made early radio possible.

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[i] Henry, Joseph, *Scientific Writings of Joseph Henry*, vol. 2, Washington: Smithsonian, 1886, pp. 332-333. See: https://www.google.com/books/edition/Scientific_Writings_of_Joseph_Henry/w6cKAAAAIAAJ?hl=en&gbpv=1&bsq=induction Originally published: "Metrology in Its Connection with Agriculture: Part V – Atmospheric Electricity," *Agricultural Report of Commissioner of Patents for 1859*, pp. 461-524.

[ii] Fahie, J.J., *A History of Wireless Telegraphy*, 2nd ed. Revised, New York: Dodd, Mead, and Co., 1901, p. 88.

[iii] Fahie, J.J., *A History of Wireless Telegraphy*, 2nd ed. Revised, New York: Dodd, Mead, and Co., 1901, p. 88.

[iv] Henry, Joseph, *Scientific Writings of Joseph Henry*, vol. 2, Washington: Smithsonian, 1886, pp. 332-333. See: https://www.google.com/books/edition/Scientific_Writings_of_Joseph_Henry/w6cKAAAAIAAJ?hl=en&gbpv=1&bsq=induction Originally published: "Metrology in Its Connection with Agriculture: Part V – Atmospheric Electricity," *Agricultural Report of Commissioner of Patents for 1859*, pp. 461-524.

[v] Brother Potamian and James J. Walsh, *Makers of Electricity*, New York: Fordham University, 1909, p. 92.

Andaman Islands

By Juris Petersons, YL2GM

Apr 28 – May 16, 2022

Andaman Islands

https://www.lral.lv/vu4w/

On 28th of April I started my journey Riga – Helsinki – Delhi with Finnair. On the way to Andaman Island I had to stay in Delhi for two days where I planned to use this time for sightseeing. After stepping outside of airport, I realized the very hot temperatures outdoors about +42 to +44˚C. I changed my plans and stayed in hotel instead.

In the evening of May 1st I had flight to Andaman Island. Plane landed in Port Blain airport the next morning. Temperature was around +32˚C and also you could feel the humid sea climate there so it was challenging. Taxi brought me to hotel *"Princess Beach resort"* that was 28 km away from the airport. This hotel was chosen to be the most suitable for expedition and previous expeditors VU4G worked from there as well. John G4IRN also suggested it for me.

From VU4 it's allowed to operate only for amateurs with VU callsigns. In the license we were three operators, however, Indian friends did not join because of work matters.

Port Blain airport

DXpedition shack

Hotel staff welcomed me very friendly and showed me a room that I declined. After explaining my needs for the space for antennas, they proposed me a conference room for additional cost that was located in a separate building next to the yard with palm trees. This actually was good location because antenna cables could be much shorter than intended. Sleeping quarters were shown in a different room. Right after settling in I started setting up LBS vertical and shortly realized that I wouldn't be able to complete it until

the dark so I left it for the next morning. Instead I worked on 40-10 m vertical intended for FT8 so I could make first QSO`s as midnight stepped in and license for VU4W was ok. While unpacking my gear I found out that K3 screen was smashed and this probably happened while the hand bag felt from the seat on the plane. So, transceiver was broken, however, I solved this problem by connecting it to computer that allowed me to change frequencies. For the remaining DXpedition I used this K3 only for FT8. First QSO is completed right after midnight with YB3BBF.

Vertical RA6LBS

The next morning, I start setting up the Spiderbeam antenna and complete it by midday. I chose the location right next to the fence because other places were covered with palm trees. After setting it up it had SWR > 5 on all bands. I checked the antenna and found the problem – broken transformer cable. After fixing it was good and I started to work on CW upper bands. In the evening I went to take some sunset pictures for QSL cards. I was lucky to do it then because this was the only evening with clear sky. The rest of the time was rainy with clouds.

Spiderbeam

The Wednesday morning I started with setting up LBS vertical. Weather was windy and foggy as the monsoon season was about to begin – two months of rain and no sun. We also received weather warnings for storm and heavy rains in South of Andaman Island for the next day.

The next day I started with setting up beverages behind the hotel fence next to the jungle. Weird noises came from there while I worked and I didn't venture deeper in the jungle because of wild crocodile risks. In the end, beverages were 120 m long. During the night wind picked up and started to tear down coconuts from the trees. Their falling and hitting on roof made loud noises like firing from a gun. From now on electricity interruptions also were frequent and at least 10 times a

day for 10-20 minutes till local generator was switched on. This was the reason for unexpected disappearances from frequencies.

Yard with antennas

On 5th of May I uploaded log and it was ~6500 QSO`s. Internet was accessible only in the reception hall that was 300 m away from the shack. In order to talk with XYL and also to set correct time I walk there every evening. Dinner was usually served at 7pm and some of the evenings I was the only visitor there. Some more visitors came only on weekends. During the day outside was +30 to +33°C and very humid. When working with antennas I had to change shirts often.

For the following days the aim was to work more on lower bands. On Sunday 8th of May first 300 QSO`s were made on 80 m CW and 40 m FT8. Propagation changed every day and for the worst. On Monday I tried for 6 m and managed to get only 6 QSOs with Japan. Later I uploaded the log and in total it was 7732 CW and 10092 FT8 QSO`s. The targeted QSO count was set 30000 for the expedition to reach Mega DXpedition standards by GDXF.

I received message from WSJT development team with question why I only operate with MSHV software instead of WSJX Fox mode. I had MSHV from previous expedition 3DA0WW because this was the only software that worked with non-standard callsigns. Other problem was that I didn't have internet connection at all times and couldn't provide my frequency for Fox mode. For this moment I operate only on standard FT8 frequencies. I know it's not the optimal solution, however, for this situation I didn't have other options.

Celebrational dinner

YL2GM, behind yard with antennas and shack, dense jungle in the far back

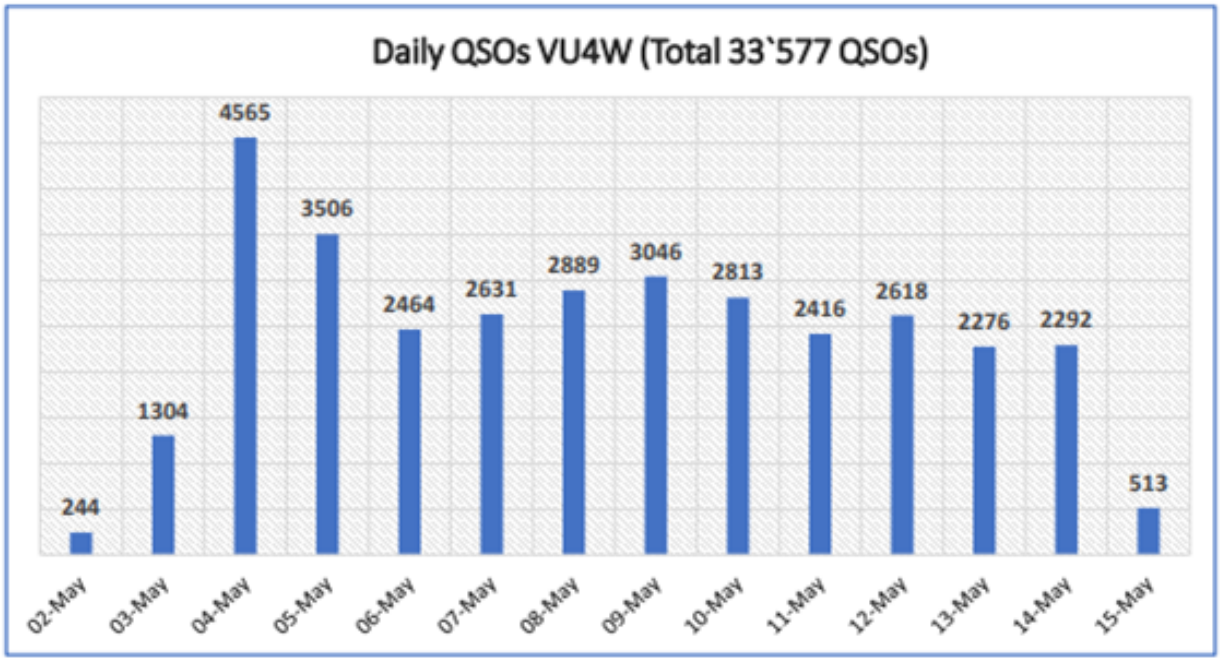
Remaining days went by in usual routine. On Saturday 14th of May I made last QSO. Goal was reached and the total QSO count was 33577. Unfortunately, not many contacts on SSB and majority of them on FT8 which is todays reality. On Sunday I took down antennas and packed all my gear. My biggest concern was the falling coconuts and if they would hit your head than in best case scenario it would be injury for life. In the evening I had celebrational dinner and photo with chef and personnel. Monday morning taxi took me to airport from where I had flight back home. From humid +30°C in Andaman Island back to Delhi +43°C. Little shopping for small gifts on the way back home from Delhi – Helsinki – Riga. Expedition is concluded and now huge work for QSL printing and dispatching.

Thanks to everyone who supported this DXpedition and who worked with us. See you soon in the next one.

Juris /YL2GM/

QSL card

STATISTICS



Band/Mode breakdown VU4W

Band	CW	FT8	SSB	Total	Total %
160	232	151	0	383	1.1%
80	901	1227	0	2128	6.3%
60	0	155	0	155	0.5%
40	699	1514	0	2213	6.6%
30	1041	1778	0	2819	8.4%
20	2800	3603	545	6948	20.7%
17	2329	4095	0	6424	19.1%
15	2551	3476	302	6329	18.8%
12	1524	1755	0	3279	9.8%
10	1469	1425	0	2894	8.6%
6	0	5	0	5	0.0%
Totals	13546	19184	847	33577	99.9%

DXCC by Band/Mode breakdown VU4W

Band	CW	FT8	SSB	Total
160	32	31	0	38
80	56	64	0	69
60	0	37	0	37
40	63	73	0	79
30	61	78	0	80
20	90	103	55	110
17	83	96	0	105
15	86	90	47	107
12	62	67	0	75
10	67	60	0	73
6	0	2	0	2
Totals	108	119	67	133

Continent by Mode VU4W

Band	SSB	CW	FT8	Total	Total %
AF	7	68	75	150	0.9%
AN	0	0	0	0	0.0%
AS	99	3405	8230	11734	14.8%
EU	664	9274	8880	18818	58.5%
NA	57	481	934	1472	19.4%
OC	9	241	828	1078	2.0%
SA	11	77	237	325	4.4%
Totals	847	13546	19184	33577	100.0%

Expedition website: https://www.lral.lv/vu4w/

Working in Comfort

By Fred Kepner, K3FRK

We bought our house a few years before I got my ticket so I did not take radio operations into consideration when we were shopping. Fortunately, the house has been very radio friendly. It has a 1,000 sq ft workshop (my shack) out back, a large yard, and many very tall trees. I do not have any home owner's association restrictions. Since becoming an active ham, I've slowly built up the equipment in my shack. I've upgraded radios, antennas, and about every other piece of equipment I own. Although I have enjoyed working the world from my shack, I haven't always been comfortable while on the radio. My shack is insulated but did not have heat or air conditioning. It has no windows and is not well ventilated. It would take a few months each summer to become hot inside and a few months each winter to become cold, but eventually it would get up to 95 degrees in the summer and down to 40 or 45 degrees in the winter. I have a propane heater, which was helpful in the winter, but there was a lot of room for improvement.

I really wanted to add an air conditioning system but was hesitant due to the perceived cost. My wife and I enjoy traveling to Caribbean islands on our vacations and I have noticed over the past few years that people on the islands have been installing a new type of small air conditioning system intended to cool single rooms or small homes. These systems are called "mini splits".

Above: The indoor air handler unit

Mini splits consist of two main parts. The first is the indoor air handler that mounts high up on the wall in the room you are cooling. The second is the compressor/condenser unit that sits outside of the home, typically on a platform located on the ground or attached to the wall. The units are connected, through the wall, with refrigerant-charged lines, a power cable, a drain hose, and a control cable.

Above: The outdoor compressor/condenser unit

My research indicated that these units were relatively inexpensive at home improvement stores and that many people install them without professional help. Many of these inexpensive units are around 10,000 BTUs and can plug directly into 110-volt receptacles. Some units that are designed to be DIY installs come with refrigerant lines that are pre-charged and ready to go, but most units are not pre-charged.

I also learned that, unlike the units I've seen on the islands, many of the units available in the US will heat as well as air condition. This new information had me pretty excited but it didn't take long for me to realize that a 10,000 BTU unit would not be powerful enough to cool my 1,000 sq ft shack. Equations are available to calculate

Working in Comfort (continued)

size needed based on cubic footage (I have an open, raftered ceiling) and a few other factors. I ran some calculations to determine what size I would need and came up with 26,000 to 30,000 BTUs. The larger units climb in price pretty quickly and require a hardwired 220-volt connection. I have a 220-volt circuit but my amp is on it. The circuit won't support both the amp and mini split at the same time so I decided another 220-volt circuit was in order.

Compared to a more traditional heating and air conditioning system, the mini split offered several advantages in my situation. My shack is separate from my home so extending my home HVAC system was not an option. Mini splits generally have higher energy efficiency ratings than traditional units, with mini splits ranging from 14-30 SEER and traditional systems ranging from 13-21 SEER. Higher SEER ratings equate to lower energy bills. My shack is insulated but not as well as a house. The higher SEER rating will have an impact. Mini splits are also ductless. There is no need to run any kind of traditional duct system. A single mini split is less expensive than a complete HVAC system. The disadvantage to a mini split is that each unit is designed for a single room or mostly open space. Since my shack is a single room, this was not a concern for me. Installing multiple mini splits for a large house could certainly be more expensive than a traditional HVAC system. For my situation, the lower hardware cost, lower installation cost (no ducts), and high energy efficiency had me sold.

After shopping for a few weeks for units, I had a pretty good idea of what I wanted, I just wasn't sure if I was up for doing the install. The larger units are heavy, a 3-inch hole is required to be drilled through an exterior wall, and charging the refrigerant is tricky. Too little or too much refrigerant will cause the unit not to operate properly and could lead to damage. I contacted a local HVAC company to come out and give me an estimate, which they did for free. The estimate was higher than expected but I did additional research and learned that it was on par with what other professional HVAC companies charge. Additionally, the company's BTU calculation confirmed my own calculation of 26,000 to 30,000 BTUs.

The project was becoming more expensive than I had planned. The unit was larger and more expensive, the install was more expensive, and I wanted another 220-volt line. I discussed options with the HVAC company. After pressing them, I was able to secure a quote that included only the install, not the unit. They were hesitant to provide the quote because they did not want to install something that they don't service, and quite honestly, I think they expected me to ask them to install an "el cheapo" unit. I surprised them. I had managed to find a very good deal on a name brand unit with very good reviews. The unit has a 10-year warranty (if installed by a professional HVAC company) and a higher SEER rating than the unit they tried to sell me. They reviewed what I had found and agreed to install it.

It took about two weeks for the unit to arrive and then another week until the HVAC company could install it. The outdoor unit was much larger and heavier than the lower BTU units. It took 3 HVAC installers and 1 electrician to get everything up and running but they did it in just a few hours. I watched the majority of the install and I think I made the right decision in having the mini split professionally installed. If I were to do it again, I would run the new 220-volt line and required outdoor power shutoff myself but let the professionals handle the rest. I know that I could

Working in Comfort (continued)

handle the majority of the install, other than charging the refrigerant, on my own but I wouldn't because the warranty would not be honored by the manufacturer. Having it professionally installed bought me the 10 year warranty.

Upcoming NADXC meeting:

Tuesday, November 8th, 2022

5:45 PM Doors Open / 6:30 PM Meeting

Location: Museum of Information Explosion and via Zoom

The Scientific Community Versus Michael Faraday

By Bob De Pierre, K8KI

A man of lowly birth and an 8th grade education, Michael Faraday quickly rose in scientific circles to become resident lecturer at the Royal Institution of London. In 1846, the well-known Charles Wheatstone was supposed to lecture, but was overcome by a last-minute bout of stage fright. Faraday knew what Wheatstone's lecture was about, so he just did it himself, and somehow just had a half hour left for something else.

At the time, Newton's physics was the gold standard of thought. People of the day were familiar with the forces of gravity and magnetism. They described these forces as "Action at a Distance." All else was simply scientific heresy. Radiation was not an understood concept – how could it ever connect with Newton?

With a half hour now left to fill, Faraday launched into the most shocking lecture of his career, verbalizing some half-formed thoughts on a possible relation between light and lines of force. The listeners were treated to a description of a "wave" model. Such an idea flew in the face of Newton's Laws. But on that night Faraday laid out the basis for the modern electromagnetic theory of light.

Electromagnetic vibrations were a totally new concept, but Faraday's many scientific experiments bore them out. Yet one scientific journal recommended that Faraday brush up on his mathematics and leave the theoretical stuff to those properly trained.

It was well known how a magnet attracted a piece of iron. And also, if you ran a DC current through a loop coiled around an iron rod, it would display a force just like a magnet. A bar magnet, thrust through a closed loop of wire, though, will set up a current in the wire. Faraday and Joseph Henry, working in the 1830s, independently noticed this. If there is no motion, there is no current. No one had yet mentioned to poor Faraday that the changing current turned the phenomena into a differential equation, and that this equation applied whether the current was changing or not. This basic phenomena is now one of Maxwell's four equations and is known as Faraday's Law.

By 1850, more physical constants of nature were becoming known. One was called the permittivity constant ε_o and another was called the permeability constant μ_o. By 1852, engineers of the day were noticing that equations involving these constants were related. Then one day Maxwell observed that multiplying them together via those equations yielded another constant 1/sqrt (ε_o μ_o) which just happened to have a value of

The Scientific Community Versus Michael Faraday (continued)

300,000,000 m/sec. The speed of light just happens to pop up as a constant in nature…without even measuring the speed of light!

Today, Maxwell's four equations do connect with Newton, and Einstein as well. Radiation is one of the now accepted concepts.

References:

1. The Electric Life of Michael Faraday, by Alan Hirscfeld.
2. Physics II, Halliday and Resnick.

Club Business and Announcements

Photos from Djibouti

Photos contributed by Steve Werner, AG4W

Steve/AG4W is currently QRV to Djibouti as part of the J28MD DXpedition (J28MD website). Here are a few pictures to hold us over until he returns and can tell us about his experiences.

October Meeting Minutes

By Chris Reed, AI4U

The North Alabama DX Club meeting was called to order by Steve Molo at 6:30p on October 11. Twenty-one members in attendance and one on Zoom.

- Chris, AI4U reported on the financial total of 8500 dollars in the account. Bob, K8KI provided a further explanation of the financial report and the banquet. The financial report was approved as explained and published in the LongPath.
- K5DF, John led the discussion on the picnic to take place at Monte Sano State Park October 30 at the pavilion. Bring a dish to eat with hamburgers and meat. It was noted that CQ worldwide SSB will be going during the picnic. A dialogue took place regarding who would bring the grill. It was also voted to have Kentucky Fried Chicken and hamburgers if someone would bring a grill. A signup sheet was passed around for the dishes.
- It was suggested that we could bring a couple of radios, folding chairs, and tables for the radios. Contacts would be plentiful due to CQ WW SSB.
- Steve, AG4W advised that coordination was taking place for J28 every day. Location of stations is good and there will even be operators on moonbounce. Gigaparts has donated coax for the Dxepedition. Swain Island was planned for March. Currently, only two flights to Swains

October Meeting Minutes (continued)

exist and they stay full. There may be travel issues both going and coming due to the limited flights.

- Bouvet's supplies have been packed and ready to ship. Bouvet takes a lot of coordination, and it is very expensive.
- Navassa, an INDEXA expedition may take place in 2023. Nothing else is on the horizon due to the expense.
- Kevin, KG4TEI reported for the nominating committee. The committee is still looking for a nominee for President.

The slate thus far is:

President	(Open)
Vice President	Mick Bell
Secretary/Treasurer	Chris Reed
	Barry Barton
Director	Bruce Smith
Director	Fred Kepner

- We need someone to step forward to serve as President.
- The vote will take place in November and installation in December.
- A discussion on the Christmas Party was held. By a show of hands, most preferred to have it

Annual Picnic Pictures

The annual picnic was held at Monte Sano State Park on Sunday, October 30th. Despite the rain, the fog, and CQ WW SSB, 24 people came out for great conversation and spectacular food.

Upcoming DX Contests

By Chuck Lewis, N4NM

OWAE DX Contest (RTTY), 80-10 meters

Nov. 12, 0000Z to Nov. 13, 2359Z

Exchange: RST plus serial number (see rules for QTC)

See page 77, Nov. QST and www.darc.de/home

Japan Int'l DX Contest, (SSB), 80-10 meters

Nov. 12, 0700Z to Nov. 13, 1300Z (48 hours)

Exchange: RS plus CQ zone; JAs send prefecture

See page 77, Nov. QST and www.jidx.org/jidxrule-e.html

OK/OM DX Contest, CW, 160-10 meters

Nov. 12, 1200Z to Nov. 13, 1200Z

Exchange: RST plus serial number or OK/OM district

See page 77, Nov. QST and www.okomdx.crk.cz

ARRL EME Contest, (CW/SSB/DIG)

Nov. 12, 0000Z to Nov. 13, 2359Z

Exchange: Signal Report

See: Page 77, Nov. QST and www.arrl.org/eme-contest

LZ DX Contest, (CW/SSB), 80-10 meters

Nov. 19, 1200Z to Nov. 20, 1200Z

Exchange: RS(T) plus ITU zone or LZ district

See page 77, Nov. QST and lzdx.bfra.org/rulesen.html

All Austria 160 Meter Contest, (CW), 160 meters

Nov. 19, 1600Z to Nov. 19, 2359Z

Exchange: RST plus Serial Nr. (OEs send district)

See: page 77, Nov. QST and https://www.oevsv.at/export/shared/.content/.galleries/_Downloads_Referate/HF-Referat-Downloads/Rules_AOEC_160m.pdf

REF 160 Meter Contest, (CW), 160 Meters

Nov. 19, 1700Z to Nov. 20, 0100Z

Exchange: RST, Serial, Department code

See: Page 77, Nov. QST and https://concours.r-e-f.org/contest/a-propos/ref-160m-contest/

Upcoming DX Contests (continued)

CQ Worldwide CW, (CW), 160-10 meters

Nov. 26, 0000Z to Nov. 27, 2359Z

Exchange: RST plus CQ zone

See page 77, Nov. QST and www.cqww.com/rules.htm

ARRL 160 Meter Contest, (CW), 160 meters

Dec. 2, 2200Z to Dec. 4, 1559Z

Exchange: RST plus Section

See: www.arrl.org/160-meter

OTHERS:

ARRL 10-Meter Contest

0000Z, Dec 10 to 2359Z, Dec 11

Dates & times often change or are misprinted in the journals; beware. Have fun!

North Alabama DX Club

2022 NADXC Officers and Directors

President	Bob De Pierre, K8KI
Vice-President	Steve Molo, KI4KWR
Sec./Treasurer	Chris Reed, AI4U
Directors:	Bruce Smith, AC4G
	Fred Kepner, K3FRK
(Ex-Officio)	Steve Werner, AG4W

How to Join

Come to a club meeting or send in an application by mail or email to Chris Reed, AI4U (form on www.NADXC.org).

Monthly Meetings

Meetings are held at the Museum of Information Explosion at 6:30pm on the 2nd Tuesday of each month. Participants can also join the meeting virtually via Zoom.

This edition of The LongPath published by: Fred Kepner, K3FRK

DXpeditions in November 2022

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Start Date	End Date	DXCC Entity	Call	QSL via	Comments
November					
2022 Nov01	2022 Nov30	Thailand	HS0ZME	SM6NT	By SM6NT fm Hua Hin; 40-10m; mainly CW; yagi, ground plane; operation to continue until Apr 2, 2023
2022 Nov01	2022 Nov15	Banaba I	T33T	LoTW	By Rebel DX Group; HF; WSJT; QSL via Club Log OQRS; dates approximate
2022 Nov02	2022 Nov06	Mariana Is	WH0R	LoTW	By JG7PSJ fm Saipan (IOTA OC-086); 40-10m; CW SSB; QSL via JG7PSJ direct w/ SASE
2022 Nov02	2022 Nov07	Lesotho	7P8CW	LoTW	By ZS6MSW ZS6ESW ZS6GC ZS6EB ZS5AYC ZS6APT ZS6ACT ZS6MMS; HF; SSB CW + digital; SR/SS: ~03:12z/16:33z; QSL via Club Log OQRS
2022 Nov02	2022 Nov09	Kuwait		LoTW	By Kuwait ARS fm Failaka I (IOTA AS-118); 80-10m; SSB CW FT8; QSL via 9K2HN
2022 Nov02	2022 Nov14	Palau	T88WA	LoTW	By N7QT WA7CPA N7JP K5EM N9ADG; 160-6m; CW SSB FT8
2022 Nov02	2022 Nov20	Tonga	A35GC	TBA	By LZ1GC LZ1PM fm Nuku'alofa & Tongatapu Is; 160-6m (incl. 60m); CW SSB RTTY FT8
2022 Nov03	2022 Nov04	Lesotho	7P8DG	Club Log OQRS	By ZS4BS; 40-10m, perhaps 60m; SSB RTTY PSK; QSL via ZS4BS
2022 Nov03	2022 Nov06	Tanzania	5H2JC	LoTW	By K5DRJ fm Same (KI85vw); 40 20m; SSB; 20w; end-fed wire
2022 Nov05	2022 Nov26	St Helena	ZD7CA	HB9FIY	By HB9FIY; 40-10m; SSB + digital; dates approximate
2022 Nov10	2022 Nov14	Cyprus SBA	ZC4RH	LoTW	By G4WXJ PA2CHR PA3FYC; HF 6 4m; CW SSB FT4 FT8 QO-100; QSL via DK6SP
2022 Nov12	2022 Nov26	Central African Rep	TL8AA	I2YSB	By 8 ops; all bands; CW SSB FT8 RTTY
2022 Nov14	2022 Nov27	Aruba	P40DA	PA7DA Buro	By PA7DA; 80-6m; SSB CW FT8 FT4; spare time operation; QSL via PA7DA direct w/ SASE + 2USD
2022 Nov23	2022 Dec04	Palau	T88PB	JA0JHQ	By JA0JHQ; 160-6m; CW SSB
2022 Nov23	2022 Nov30	Honduras	HR5	LoTW	By F2JD as HR5/F2JD fm Copan Ruinas; HF; CW SSB RTTY FT4 FT8; operation to contiue until March 13
CQ WW DX Contest, CW (Nov 26-27, 2022) Check here for pericontest activity too.					
2022 Nov30	2022 Dec05	Palau	T88RC	LoTW	By JH1FFW; 40 20 17 15 10m; SSB FT8; QSL via JH1FFW Buro
2022 Nov30	2022 Dec09	St Martin	TO9W	LoTW	By K9NU N9EP FS4WBS W9AP K9EL; 160-10m focus on 160 80 40m; QSL via Club Log OQRS or W9ILY direct