SOUTHEASTERN DX CLUB

Bulletin

DX CODE OF CONDUCT

April 2023

Founded In 1958

Our Next Meeting & Speaker

Date & Time: April 20, 2023, 7:00 PM
Location: Via Zoom
Topic: DXpedition to the Congo: TN8K
Speaker: Petr Spacil / OK1FCJ

Petr will give a report on the very successful DXpedition to the Republic of the Congo TN8K that logged close to 165,000 QSOs.

He has been a radio amateur since he was 16 years old. Gradually he acquired radio amateur licenses OL1BSI, OL1VLI and finally OK1FCJ and contest tag OL8R which he actively uses in contests.

Most often you can make contact with him during a contest either under the OL8R or as a club competition with the OL3Z call sign.

Apart from contesting, where he mainly focuses on CW, his strong focus is DX countries activation. Either alone in the past years or as part of the CDXP team.

Please join us for an interesting and entertaining presentation.

From the Prez *(de Chuck Catledge, AE4CW)*

Fellow DXers, welcome to the SEDXC April 2023 Bulletin!

The Georgia QSO Party, as always, was a fun event. Improved propagation from last year seemed to open up states earlier in the day, particularly the west coast and Alaska plus more upper New England states. I missed Hawaii and Wyoming largely due, I think, to Easter activities that limited participation to only eight hours. But six Canadian provinces helped add to the score. I was especially pleased to catch thirty-four Georgia counties too! If you missed the GQP I suggest adding it to your calendar for 2024!

The Solar Flux this month has been down in the 120s to 140s, a drop from the 150s and above for most of March which hit the 190s briefly in early March. The Flux seems to oscillate with a somewhat regular frequency, so hopefully we will see an upswing as April progresses.

The good news is that DXpedition activity is on the upswing. Here are a few that should be active when this Bulletin is published or shortly thereafter:
4W1A – Timor Leste is active now through April 20.
8Q7KB – Maldives plans to be active from April 27 to May 7.
T30UN – West Kiribati is active now and until about mid-May.
DXØNE – Spratly plans to be active from April 20 to May 9.

To enable DXing in locations that have very sensitive environmental restrictions, George AA7JV is hopscotching across French Polynesia demonstrating the efficacy of a RIB or "radio in a box". Take a look at this YouTube video from April 9 with George and Mike KN4EEI describing the benefits of remote operation using "RIBs": https://www.youtube.com/watch?v=TxmLyaqH7s8. And check out George's QRZ page showing how the "RIB" landing and setup process works: https://www.qrz.com/db/AA7JV.

On another note, I wonder how many SEDXC folks design and build their own antennas? If you do, great! And if not stick around for a moment; there's free money here! For those who do, I suspect you know about the modeling programs EZNEC and 4NEC2. Both programs are quite easy to learn and use. You no longer have to "guesstimate" how long each antenna wire or element needs to be; the programs calculate those lengths very accurately eliminating the multiple "cut and try" approach. I never build an antenna without running the model first. And the outcome is almost always exactly what the model predicted. The math behind these models, called Numerical Electromagnetic Code or NEC, was developed by the Lawrence Livermore Nation Laboratories. And hams, being hams figured out how to make the math easy to use, hence EZNEC. Until last year, the l cost of EXNEC ranged from $99 to as much as $675.

Here's the FREE MONEY; ALL versions of EZNEC are now FREE for hams!! And, even the most sophisticated NEC engine from LLNL is only $110 for hams (commercial prices are up to $2,400). Give modeling a try; you might like it; plus, it saves time and money!

73 es Gud DX
Chuck AE4CW
President SEDXC

DX Elmers

A Service of the Southeastern DX Club

VP's Corner *(de Clark Macaulay, WU4B)*

We are pleased to have Petr / OK1FCJ give us a report on the very successful DXpedition TN8K to the Republic of Congo in January 2023. This DXpedition was sponsored in part by the SEDXC and many of our members contributed to the 160,000 QSOs in the log.

Petr is a veteran DXer who enjoys traveling to and operating from other countries. As noted on his www.qrz.com page, he has operated in 26 DXpeditions from 1988 to 2023 with the recent 12 as a member of The Czech DXpedition Group

https://www.cdxp.cz/.

73 es gud DX,

Clark, WU4B

A Few Words about New Members:

de Jeff Cantor / K1ZN

Dan Osment, W4DTO

Dan lives in Dallas GA. He is also a member of the Silver Comet ARC. He took the test in 2011, and became licensed. He says, "I wanted the license because I was interested in the technology, and strangely, I really don't like talking on the radio.

As good fortune would have it I fell in with a group of hams who made up the Silver Comet Amateur Radio Society (http://silvercometars.com) and Paulding County ARES (http://pauldingares.com). A finer bunch of Elmers there has never been! I've learned a tremendous amount from these guys, and it is a great honor for me to serve our county's public service agencies with them.

My HF time has been pretty slim. A good friend of mine, Steve, K4ELI got me interested. It's been great fun making contacts with people all over the US and as far east as the Czech Republic and Ukraine. Who knows where it will go from here! So, thanks, Steve for getting me bitten by that bug. When my wife asks why I'm spending so much money on envelopes and postage I'm going to tell her it's all your fault!"

Greg Gilbert, KN4APC

Greg lives in Marietta. He received his Extra class license in 2017. He has enjoyed SWL'ing since the age of 14. The art of radio transmissions, sending signals around the world has always peaked his interest. He says, "it is fun to play radio with 100 watts and a wire."

Kory Oldham, N4KGO

Kory first got his Tech ticket back in March 2004 (KI4ESU), He says "I've been a radio enthusiast for years before that. I was inspired by my Uncle KH6MT who sent me my first radio book when I was barely a teenager from Hawaii. Never got a chance with life events to upgrade. After my wife passed in Jan 2020, I needed something to occupy my mind so I got back into Ham radio full force. Started out with the local clubs and the 2m Fun, which I still do today. I finally upgraded to General in Jan 2021, and decided to change call signs for personal reasons to N4KGO. My desire was always to work the world of DX, so I am happy to be doing that."

73 & GUD DX, Jeff / K1ZN

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

Greetings, Fellow DXers!

Disbursements to report for last month:

Purpose	Amount
Treasurer's Report	
Disbursements	
Postage (March 2023)	$5.50
Sponsor of GA QSO Party Plaque – Mixed Low Power	31.00
TOTAL:	***$36.50***

April 4, 2023 Account Balance is $11,932.08

TNX, 73 & GUD DX

Jeff, K1ZN

This month we received a request for funding from The Perseverance DX Group for an activation of Clipperton Island (FO-C), January 18, 2024 – February 2, 2024. Clipperton Island is on the Most Wanted list for North America -East Coast #81 and Globally #38. In the IOTA Program (NA-011), it is claimed by 64% of this membership.

We did a log survey of SEDXC ClubLog members and found that of the 20 members looked at 7 needed FO-C as an ATNO. An additional 10 could use it as a band fill.

Accordingly, the leadership group recommends an award of $250 to the Perseverance Group for this activation. Discussion and a membership vote to follow at the April 20th meeting.

**Request for funding documents attached at end of Bulletin.*

Activities Report:

de Bob Hensey, K4VBM

New member meeting held Mar 23, 2023 attended by 6 of the 24 new members. Thanks to Chaz and all the board members who attended acting as Elmers - the new members expressed their appreciation for all the good info and help received. The ZOOM meeting was recorded, and the new members that missed the meeting can view the recording at:

https://t-rexsoftware.com/sedxc/dxelmers/videos/dxelmers_03_23_23.mp4

The DX marathon is ongoing for 2023, and participation is very encouraging. I hope you all take the time to access your ClubLog 'Settings', and under the 'Club' tab select "SEDXC - Southeastern DX Club" which will

enable your participation in the Club Leagues section, and upload your log to ClubLog regularly.

The Atlanta Hamfest is coming up Saturday June 23rd. We will have a booth there, and hopefully card checking at the hamfest. Mark your calendars!

The new sunspot cycle continues to be very encouraging, and the bands are full of DX most days. Hope you all are catching those new ones and band fills!

Bob Hensey
K4VBM
Activities Manager

Around The Shack

April, 2023 de Hal Kennedy N4GG/4

TLW
Transmission Line for Windows

There is a piece of software every ham needs. If you are unfamiliar with TLW (*Transmission Line for Windows*) it's time to get a copy. TLW is a very useful tool that's easy to learn and easy to use. If you are using a transmission line (who isn't?) this simple program will help you determine the performance of your current transmission line and/or pick the best one for your next antenna project.

Transmission Line for Windows (TLW) was written by Dean Straw, N6BV, in 2000. The program has been through several updates; the latest version is 3.24, released in 2014. The program has been stable from the start; the updates have been minor parameter tweaks, not "bug-fixes." If you have an older version it will be okay to use in nearly all cases. The latest release improved the accuracy for ladder line and open wire line. If you plan to work with those lines the latest version is recommended. In most cases you can get a free update at the ARRL web site.

TLW comes bundled with the ARRL Antenna Book. It's a small executable (376 KB) that runs on any version of Windows. When the program starts, the "front page" looks like Figure 1. For estimating the loss in transmission lines, the front page is all you need. The front page is self-calculating. Every time you change any input parameter the recalculated output appears at the bottom of the page. There is no "calculate" button.

What can the front page of TLW actually do? If you enter a frequency, a transmission line type from a pull-down menu and a length, the program returns a loss number. You can also input antenna impedances other that 50 ohms (1:1 SWR) and see the effects of SWR on transmission line loss.

For those who are rusty on the fundamentals:

- Transmission line loss increases as frequency increases
- Transmission line loss increases as SWR increases
- Transmission line loss increases as line length increases
- 3 dB loss is half power, i.e., 100 watts at the transmitter is 50 watts at the antenna. 6 dB loss is ¼ power.

Let's take a look at Figures 1, 2 and 3. These are for a 200 foot transmission line for six meters. Figure 1 is for RG8-X, Figure 2 is for RG8A and Figure 3 is for ½ inch hardline. You don't need to know the characteristics of these transmission line types - you simply select them from a built-in menu. Thirty-three of the most common transmission line types are there to choose from. There is also an "other" option where you can define a transmission line not in the menu.

Here are the results from Figures 1, 2 and 3, assuming 100 watts at the transmitter. I have added a few additional transmission line types not shown in the figures:

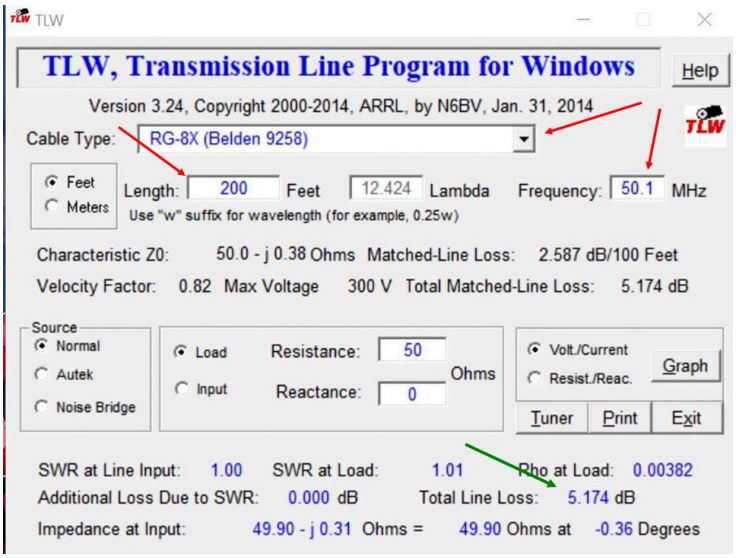


Fig 1

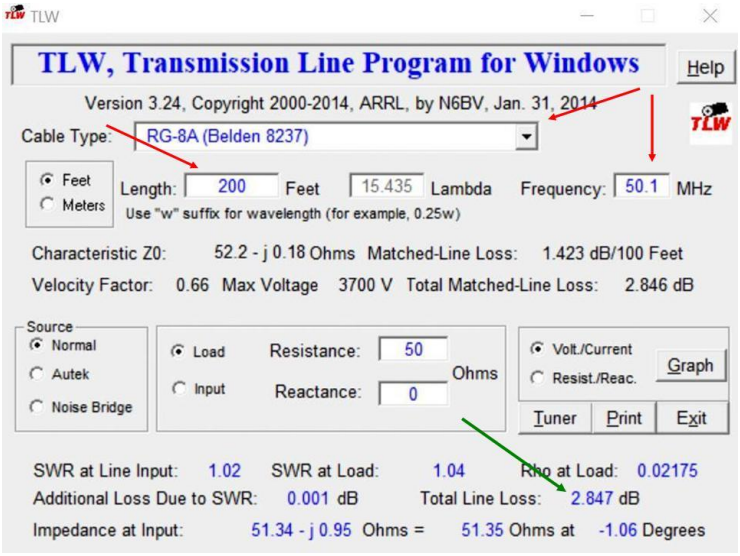


Fig 2

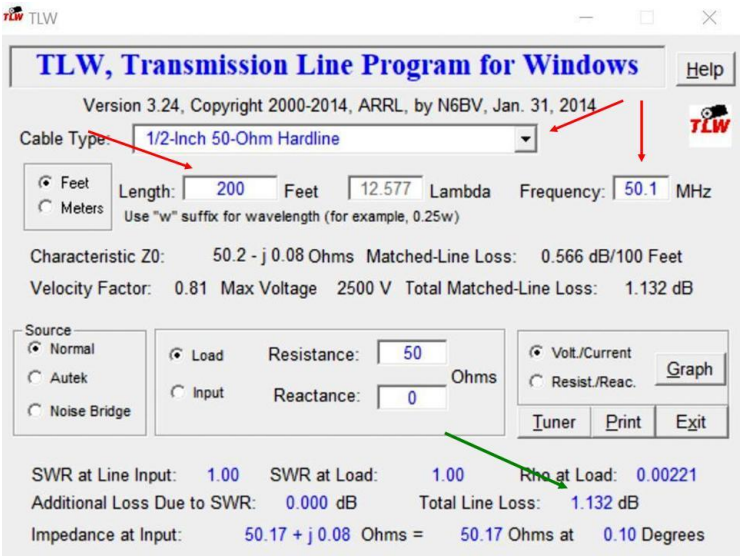


Fig 3

Cable type	Loss SWR: 1:1	Loss 2:1	Power at the antenna 1:1	2:1
RG-8X	5.2 dB	5.6 dB	30W	28W
RG-213	3.1 dB	3.5 dB	49W	45W
RG-8A	2.8 dB	3.2 dB	51W	48W
LMR 400	1.8 dB	2.1 dB	66W	62W
½" Hardline	1.1 dB	1.3 dB	78W	74W
½" Heliax	0.9 dB	1.1 dB	81W	78W

From the table it's easy to see "you get what you pay for." RG-8X would be a poor choice for a long transmission line on six meters. RG-213 and RG-8A are better with loss around 3 dB. Can we do better? Sure, but attaining lower loss comes with costs. The cost of the cable goes up and, the difficulty of working with larger cables is higher. Hardline in particular is difficult to work with and requires special connectors.

The decision in this case, as in most cases, is up to the designer. You can use low cost cable and accept the loss, or spend the money and expend the installation effort by going with "the good stuff." TLW provides the information you need to make a decision, but it won't decide for you!

I created the loss data in the table in about five minutes. The cables were in the pull down menu. I made the change from 1:1 to 2:1 SWR by changing the Resistance value of the load (antenna) from 50 ohms to 100 ohms. As an aside, with 100 watts input to a coaxial cable and 30 watts output, where does the missing 70 watts go? The lost power was converted to heat. Try running RG-8X at 1,500 watts sometime. It gets noticeably warm and may or may not fail depending on the SWR and the cable's manufacturing details. There is a prior *Around the Shack* column on this.

Let's use TLW to take a quick look at an age-old, practical (read: not hypothetical) question. 75 ohm CATV hardline is often available for free or at deminimus cost. Should we use it? The price is right. If we accept the CATV company's largess, what's the best way to deal with the 75 ohm to 50 ohm mismatch at the transmitter, and again at the antenna end of the line? Here is transmission line loss data comparing 50 ohm hardline to 75 ohm hardline with no matching at the ends. For the 75 ohm hardline we'll accept the mismatch and 1.4:1 SWR:

<u>28 MHZ, loss in 200 feet of transmission line</u>

½ inch 50 ohm hardline, SWR 1:1 0.81 dB
½ inch 75 ohm hardline, SWR 1.4:1 0.87 dB
7/8 inch 50 ohm hardline, SWR 1:1 0.51 dB
7/8 inch 75 ohm hardline, SWR 1.4:1 0.55 dB

<u>144 MHz, loss in 200 feet of transmission line</u>

½ inch 50 ohm hardline, SWR 1.1 2.1 dB
½ inch 75 ohm hardline, SWR 1.4:1 2.2 dB
7/8 inch 50 ohm hardline, SWR 1:1 1.5 dB
7/8 inch 75 ohm hardline, SWR 1.4:1 1.6 dB

It only took a few minutes to generate the above data using TLW. What do we see? 75 ohm cable is perfectly good for amateur use without using 50 to 75 ohm matching on the ends. Using the cable with the mismatch only costs about 0.1 dB of additional loss. I'll give this case further examination in an upcoming *Around the Shack* column, but suffice it to say:

75 ohm CATV cable is an excellent choice for amateur use, and does not need 50:75 ohm matching on either end.

There are two additional pages behind the front page in TLW. On the front page there is a selection called "Graph" – this brings up a graph of the voltage and current along the transmission line. This is particularly useful when the SWR is greater than 1:1. The peak voltage and current on the line can be higher than you expect.

A second feature in TLW is its ability to calculate matching networks. To use this feature, set the source location from "load" to "input," (or set the transmission line length to less than one foot) and select "Tuner." A table of assumptions appears. Typically the only value in the table I might change is the power level, although the default is 1,500 watts and it's interesting to see what the matching network is going to have to handle at that power level.

Fig 4

Low-Pass L-Network

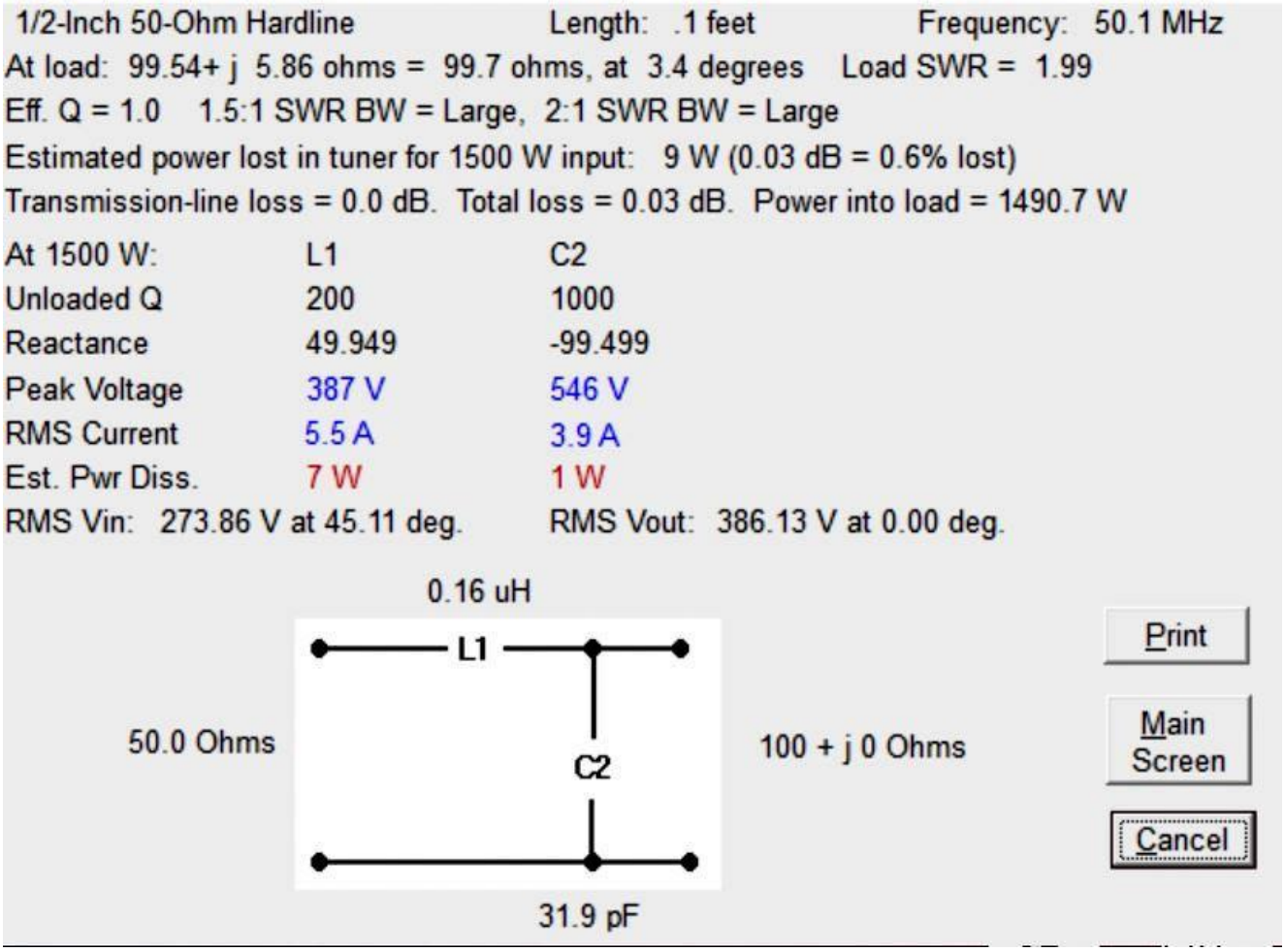


Figure 4 shows a Low-Pass L-network TLW created to match a six meter antenna's 100 ohm resistance (SWR = 2:1) to 50 ohms. The power is 1,500 watts. Note the peak voltage across the inductor is nearly 400 volts and the peak current through the inductor is 5.5 amps. Using reasonable assumptions the inductor will dissipate about 7 watts. The capacitor will have 546 volts peak across it and 3.9 amps of current flowing through it. I

wrote a column some time ago about transmit-quality mica capacitors. This is the place for one of those! The typical junk box capacitor will not handle 3.9 amps at 50.1 MHz – it will let all the magic smoke out!

If you do some "what-ifs" with TLW and look specifically at the network function, you can see some startlingly high voltages and currents at 1,500 watts. This is what high-power antenna tuners have to accommodate internally. High power tuners cost a lot of money and often fail. TLW gives you the data to know why. There was an *Around the Shack* column on QRO considerations four years ago. The data in that column was calculated using TLW.

That's a quick trip through TLW. The insights provided are worth the minimal effort to get it up and running. Actually, to get it up and running simply requires launching TLW3.exe.

I sometimes think I have biased this column too much toward HF over the years. This month's column is different. You can use TLW to analyze cable loss from below the broadcast band to SHF (frequencies above 3 GHz). Let's take a quick look at two cases - a 920 MHz repeater and a 132 KHz (2,200 meters) vertical. I ran these cases using TLW in less time than it took to write them up.

For the 920 MHz repeater case, let's assume the antenna is 40 feet away from the transmitter (30 foot tower, 10 feet to get to the rig). This is realistic and there are plenty of 920 MHz repeaters on the air including here in my home base of Atlanta.

RG-8X: Loss: 5.5 dB (Good thing it's only 40 feet!)
RG-8A: Loss: 2.8 dB
½ inch Heliax: Loss: 1.2 dB
1-1/4 inch hardline: Loss: 0.4 dB

This case illustrates the trade-offs designers have to make. If this transmission line had to be 200 feet long, the only choice would be hardline and the cost would be high. Forty feet of hardline is easy enough to come by - so that's what I would choose. Either bought new or found surplus, 40 feet of hardline is not going to break the bank. The choice seems pretty obvious.

Now let's look at the other end of our allocated spectrum. Here is the case for a 2,200 meter band (132 KHz) matching network with an 80 meter vertical as the antenna. Using EZNEC, the impedance at the base of the antenna is R= 0.2 ohms, j = -9860 ohms. The antenna is essentially a capacitor. The SWR at the base is 4176:1! That's not a typo. The SWR exceeds four thousand to one. I looked at the four matching networks TLW designed to see what might work. Here are the results for Hi-Pass and Low-Pass L-Networks with 100 watts of transmitter power. Vcoil and Vcap are the voltages across the inductor and capacitor. Icoil and Icap are the currents. Pcoil and Pcap are the power dissipated in the coil and capacitor.

Hi-Pass L-Network

Vcoil: 11,285 volts! Icoil: 2.2 amps, Pcoil: 89 watts.
Vcap: 11,284 volts! Icap: 1.4 amps, Pcap: 11 watts.
The inductance of the coil is 4,300 uH.
The capacitor is 214 pf.

Low-Pass L-Network

Vcoil: 19,104 volts! Icoil: 1.5 amps, Pcoil: 100 watts!
Vcap: 100 volts, Icap: 0.4 amps, Pcap: 0 watts.
The inductance of the coil is 11,000 uH
The capacitor is 7,500 pf.

A few things become evident regarding getting on our new 2,200 meter band. First, an 80 meter vertical isn't "enough antenna" to do the job. Next, in either tuner configuration, all 100 watts of the transmit power is being dissipated in the matching network. Nothing is making it to the antenna. This, of course, is not quite correct. That's the answer from a model and in this extreme case the model doesn't have enough precision to calculate the power delivered at the antenna. It will be something less than 1 watt – that's close enough to tell us what we need to know.

If you Google 132 KHz transmitters and antennas you will notice something – the inductors used in matching networks are extreme. They are typically hundreds of turns of wire around a 5 gallon bucket, and many have arc and burn marks at the antenna end of the coil. TLW tells us the voltage at the antenna is between 11 KV and 19 KV! At 100 watts of transmitter power, the antenna is not safe - not by a long shot. The design and construction of the inductor is an engineering challenge. If you log into the WSPR network, you will only see two or maybe three stations transmitting on the 2,200 meter band at any given time. Now you know why.

TLW is a must-have program. For more information, see the article *Introducing an Improved Version of Transmission Line for Windows Software* by Joel Hallas, (W1ZR), in the June, 2014 QST.

TLW also has an excellent built-in Help File. The Help File and a brief history of TLW are available on the ARRL web site. They are there for everyone, including those who don't own a copy of the Antenna Book.

73,
Hal N4GG

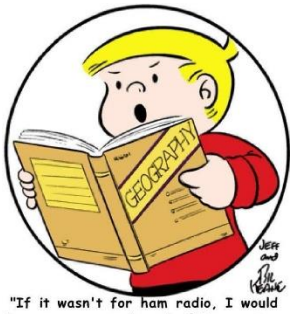
Figure 1. Inputs (red) and output (green) for 200 feet of RG-8X

Figure 2. Inputs (red) and output (green) for 200 feet of RG-8A

Figure 3. Inputs (red) and output (green) for 200 feet of ½ inch hardline

Figure 4. TLW produced Lo-Pass matching network for a 100 ohm load at 50.1 MHz

35 Years Ago... *(de Van Herridge, N4VGE)*



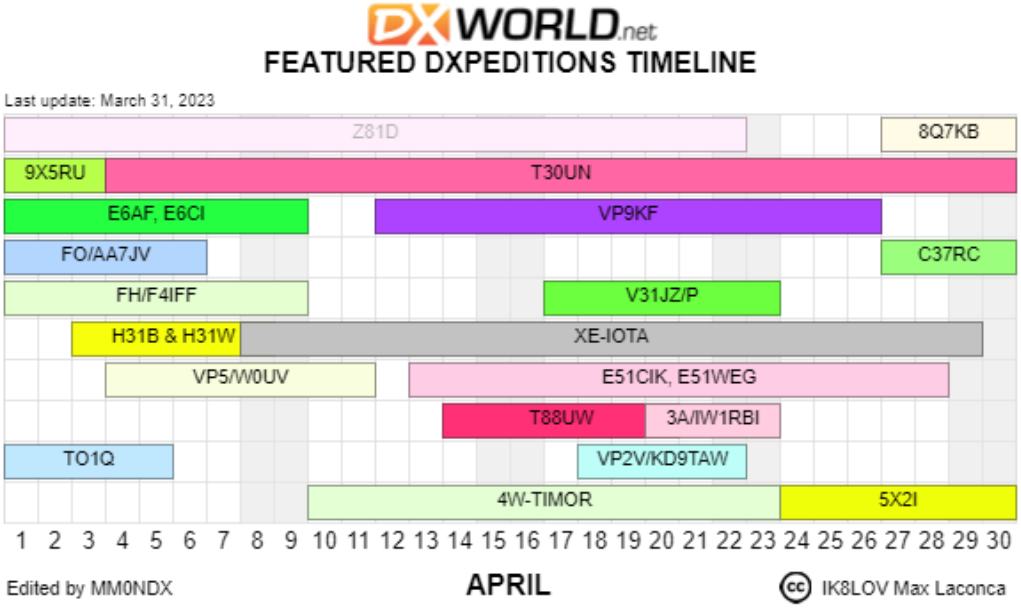
"If it wasn't for ham radio, I would have never even heard of Kyrgyzstan, Brunei, Kiribati, Djibouti, Malta, Nauru, Azerbaijan, or Burkina Faso!

The April 1998 Bulletin is missing so I provided a link below for the April 1988 Bulletin. linked below for your entertainment. Please note on page five there is an article on computer logging and on page 6 an article on "What is Electricity". Next month I'll be back to the 25 Years Ago.

Follow this link for the April 1988 Bulletin.

https://t-rexsoftware.com/sedxc/bulletins/sedxc0488.pdf

DXWorld.net DXpedition Timeline



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: http://www.hamradiotimeline.com/timeline/dxw_timeline_1_1.php

SEDXC Officers & Positions

SEDXC Officers:

Chuck Catledge, AE4CW – President – c.catledge@gmail.com

Clark Macaulay, WU4B – Vice-President – macaulay@gmail.com

Joel Levine, WA4HNL – Secretary – jlevine@bellsouth.net

Jeffrey Cantor, K1ZN – Treasury – jacantor9@gmail.com

Bob Hensey, K4VBM – Activities Manager – ptcorners@gmail.com

**Request for funding documents.*

Clipperton Island 2024 DX-pedition

PDXG Expeditions, LLC
PO Box 69965
Tucson, AZ 85737

March 23, 2023

It will have been 11 years since the last major Clipperton Island DX-pedition.

Clipperton is uninhabited, claimed by France and administered from French Polynesia. Approvals for this project were granted by: the French: navy, environmental agencies, the ANFR, and finally the High Commissioner, Papeete, French Polynesia. Clipperton is declared an environmentally sensitive island (a nature reserve) which requires a lengthy and detailed approval process to land. ANFR has reserved the call sign TX5S for this project.

The *Shogun*, from San Diego, California will provide transportation and logistics. The ship's crew will include seven qualified seamen (one who has been to Clipperton five times). Two of the crew are licensed captains. The ship has three custom made aluminum skiffs (landing boats) which the crew will use to transport our team and our equipment to and from the island. Landings at Clipperton are very dangerous, at least two, sometimes three, crewmen will manage each landing attempt.

Shogun was used for the 2000, 2008 and 2013 DX-peditions to Clipperton, and has been to the island for many non-radio projects. The ship has a proven track record of DX-expedition support, as does our team. Project cost is

estimated at ~$350,000(USD) with the most expensive items being the ship, generators and tents. The impacts of inflation are visible everywhere, especially the ship charter. With a limited number of available and approved ships, serious DX-peditions to ecologically sensitive / restricted entities are complex and expensive.

Team member fees do **not** include transportation and living expenses to San Diego, California. At project conclusion we will publish a financial summary. Any surplus funds will be evenly divided across the on-island team members.

We appreciate your consideration and hope you can support our project. Please consider the timing of any donation; we must pay **all** expenses in 2023.

Thank you in advance for your consideration and support.

Sincerely,
Clipperton 2024 Team

General Information

- Landing permit issued by High Commissioner, French Polynesia (available on request)
- Planned on island operation: Jan 18, 2024 – Feb 2, 2024
    - Estimated cost: ~ $350,000(USD)
    - Does not include the operator's travel to San Diego, California, accommodations, or meals
- 16 Experienced DX and Contest Operators
    - Jacky F2CW/ZL3CW Expedition Leader, Dave K3EL (Co-Leader), Gene K5GS (Co-Leader / Treasurer), Heye DJ9RR, Steve W1SRD, Laci HA0NAR, Ricardo PY2PT, Walt N6XG, Rob N7QT, Chris N6WM, Glenn KE4KY, Andreas N6NU, Dave WD5COV, Arliss W7XU, Philippe FO4BM.

- Number of Stations: 8
- QSO Target: 80,000 - 100,000
- Bands/Modes: 160 – 6m, CW/SSB/RTTY – FT8
- Planned on-island: 16 days
- Equipment: Elecraft K3(s), Elecraft KPA-500, Gemini DX-1200, OM Power and Flex PGXL amplifiers
- Antennas: Verticals, Mono-band VDAs and Hex beams
- QSL Manager: Tim Beaumont, M0URX
    - OQRS: $5.50(USD) unlimited contacts / cards per call sign
    - OQRS: Express LoTW $4.00(USD) with free Buro card
    - Buro Card via OQRS: $3.00(USD)
    - QSL card direct mailed to QSL Manager: $5.00(USD) or 5 Euros
- Uploads:
    - Log uploads from the island

- Full log LoTW upload 12 months after project

- Commitment to Sponsors:
  - Sponsor logos will appear on our website, PowerPoint presentations and QSL cards
  - If provided, photos with sponsor flag and/or tee shirts
  - Financial summary will be sent to Club and Foundation sponsors
  - Article will be sent to sponsoring organizations that request a copy

- Call sign: TX5S reserved by ANFR

- Website: TX5S.net

Grants and Donations in US funds can be made by check or money order to:
PDXG Expeditions, LLC
PO Box 69965
Tucson, AZ 85737-0025
USA

- PayPal to: support@pdxg.net
- Outside the US may use PayPal or contact gene@k5gs.com for wire transfer details

Please address questions to: Gene@k5gs.com

Fill out the form completely and send it to: Treasurer.SEDXC@Gmail.com

Entity Name / Call Sign	**Clipperton Island 2024 DX-pedition / assigned call-sign - TX5S**
Date of Applicantion	**March 23, 2023**
Approx. Date and duration of Dxpedition	Jan 18, 2024 – Feb 2, 2024
Web page	TX5S.net
Team leader / number of members:	Perseverance DX Group; Jacky F2CW/ZL3CW Expedition Leader, Dave K3EL (Co-Leader), Gene K5GS (Co-Leader / Treasurer); 15 members
List name & call of each team member	Jacky F2CW/ZL3CW, Dave K3EL, Gene K5GS, Heye DJ9RR, Steve W1SRD, Laci HA0NAR, Ricardo PY2PT, Walt N6XG, Rob N7QT, Chris N6WM, Glenn KE4KY, Andreas N6NU, Dave WD5COV, Arliss W7XU, Philippe FO4BM.
List DXPeditions that each team member above took part in	VK9MT, TX3X, VP6D, and VP8PJ. Additionally its members have been on other seagoing projects with other DX teams including: ZL9HR, VK0EK, 3Y0X and many others (too many to list)
QSL manager / QSL route	QSL Manager: Tim Beaumont, M0URX
Funding amount requested – please attach budget & show team's contribution	**See attached Sponsorship Request**
Send Funds to:	**See attached Sponsorship Request**
Position on most wanted list – both global & North America – East Coast	Global: 38 NA-EC: 81
Landing permit/operating permission approved (attach copy).	**See attached Sponsorship Request**
Overview of antennas & equipment to be taken on DXPedition	**See attached Sponsorship Request (similar to VP6D operation)**
Last time(s) this entity was activated	**Most recent: 2000, 2008 and 2013**

SOUTHEASTERN DX CLUB

W4NT

HEADQUARTERED IN ATLANTA, GEORGIA

DX ALERT FREQUENCIES:
147.500 SIMPLEX
147.195/R K4SMX (ACCESS TONE: 7)
147.795/T

APRIL 1988

RAGCHEW FREQUENCIES:
147.470; 147.520' 147.540

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NEXT MEETING TUESDAY, APRIL 19, 1988 AT THE DAY'S INN
AT THE NORTHWEST CORNER OF WINDY HILL ROAD AND I-75

****

PRESIDENT:	KEN BYERS, K4TEA	955-5800
VICE PRESIDENT:	DAVE CURRAN, WD4RCO	872-4339
SECRETARY/EDITOR:	SANDI JORGENSON, KL7JAR	476-1374
TREASURER:	NEIL FOSTER, KC4MJ	449-3340
ACTIVITIES MANAGER:	DAVE THOMPSON, K4JRB	448-0588

****

NEW MEETING LOCATION

FOR THE PAST TWO YEARS, OUR CLUB HAS MET AT THE DAYS INN (FORMERLY THE SQUIRE INN) AT ROSWELL ROAD AND I_285. THE ARRANGEMENT WORKED VERY WELL. HOWEVER, DUE TO THE PARKING PROBLEM ASSOCIATED WITH THE NEW COLONNADE RESTAURANT, THE HOTEL HAS DECIDED TO IMMEDIATELY CANCEL ALL GROUP MEETING DEALS.

WE HAVE FOUND AN ALTERNATIVE MEETING SITE - THE DAYS INN AT THE NORTHWEST CORNER OF WINDY HILL ROAD AND I-75. THE FACILITIES SEEM COMPARABLE. OUR APRIL 19 MEETING WILL BE HELD HERE, AND IF ALL SEEMS SUITABLE, WE WILL CONSIDER IT AS OUR NEW PERMANENT MEETING PLACE.

THERE IS ONE CATCH. IN ORDER TO HAVE A MEETING ROOM FOR FREE, OUR GROUP MUST ORDER AT LEAST 20 DINNERS. OTHERWISE, WE WILL PAY $50 RENTAL FEE FOR THE ROOM, BUT SINCE THERE IS NO MEETING FEE IN OUR BUDGET LET'S MAKE CERTAIN WE HAVE AT LEAST 20 DINERS BEFORE OUR MEETING. CHECK OUT THE ACCOMPANYING MENU, AND I WILL SEE YOU FOR DINNER ON APRIL 19.

KEN, K4TEA

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todd's DINNER MENU

CONTINENTAL DINING

Accompanied by tossed green salad or soup of the day and rice pilaf or your choice of potato.
These Todd's specialties are available 5 to 10 p.m.

Fried Shrimp 8.95
Delectable shrimp deliciously coated and deep-fried

Rib Eye Steak 11.95
Half a pound of choice aged beef broiled as you like it

Fried Chicken 7.50
From the best recipes of the Old South a new tradition in mouthwatering tenderness and golden fried crispness

Seafood of the Day 9.50
The chef's selection of a delightful seafood entree delicately prepared each day

New York Strip 11.95
A generous cut of well-marbled, aged beef, broiled to perfection

GARDEN FRESH SALADS & UNIQUE SOUPS

Mixed Green Salad 1.50
A festive medley garnished with fresh garden vegetables

Onion Soup Gratinee 1.95
Oven baked cheese caps with classic, spicy soup

Soup and Salad Combo 3.50
Choice of soup of the day or onion soup with mixed green salad

GOURMET BURGERS & OUTSTANDING SANDWICHES

Accompanied by steak fries and garnished with spiced apple ring.

Todd's Burger	3.50
Cheeseburger	3.75
Reuben Sandwich	4.25
Club Sandwich	4.00

STANDARD POURINGS

Coffee, Tea or Soft Drinks		.55
Milk	—Small	.75
	—Large	1.25

DESSERTS

Southern Style Pecan Pie	1.50
Apple Pie	1.25
Ice Cream	1.25

FUN FOOD & SNACKS

Classic Nachos 3.25
The traditional cheese favorite

Zucchini Sticks 2.75
Dipped in a light tempura batter and deep-fried to a golden brown

Fried Mushrooms 2.75
Succulently fried in a light tempura batter

NEWSLETTER CLASSIFIEDS

FOR SALE: DRAKE W-4 WATTMETER IN EXCELLENT CONDITION, CONTACT SANDI, KL7JAR, EVENINGS (404) 476-1374

WANTED: USED TS930 AND CLIPPERTON-L. CONTACT MIKE, K4PI (404) 942-4576

FOR FREE AND FOR SALE: DAVE, K4JRB (AND FAMILY) WILL BE HOLDING A GARAGE SALE ON SATURDAY, APRIL 23 FROM 9:00 AM TO 4:00 PM. DAVE WILL BE GIVING AWAY MANY SMALL HAM ITEMS IN ADDITION TO SELLING (AT AN EXTREMELY REASONABLE PRICE) SOME SURPLUS HAM RELATED ITEMS SUCH AS MAST SECTIONS AND CABINET RACK. THE ADDRESS FOR THE EVENT IS:

4166 MILL STONE COURT
NORCROSS, GEORGIA
PHONE (404) 448-0588

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DAYTON HAMVENTION VS. THE BLUES BROTHERS

SEDXC WILL ONCE AGAIN MAKE ITS PRESENCE KNOWN AT THE DAYTON HAMVENTION. THE BLUES BROTHERS (KEN, K4TEA; BILL, N4NX; HUGH, N4RJ; AND BILL, WA4VDE) HAVE BEEN VOLUNTEERED TO HOST THE CLUB'S HOSPITALITY SUITE FOR THE EVENT. PLACE: STOUFFERS HOTEL DOWNTOWN DAYTON, SUITE 425. PHONE: (513) 224-0800. HOURS +/- 7:00 PM UNTIL EVERYONE LEAVES ON BOTH FRIDAY AND SATURDAY EVENINGS APRIL 29 AND 30. ALL CLUB MEMBERS ATTENDING THE HAMVENTION ARE ENCOURAGED TO "BE THERE" TO HELP WITH LIQUID REFRESHMENT DISPENSING AND SOCIALIZING. IF YOU NEED DIRECTIONS OR WHATEVER, CALL ONE OF THE BLUES BROTHERS (THEY WILL ALL BE REGISTERED AT THE HOTEL).

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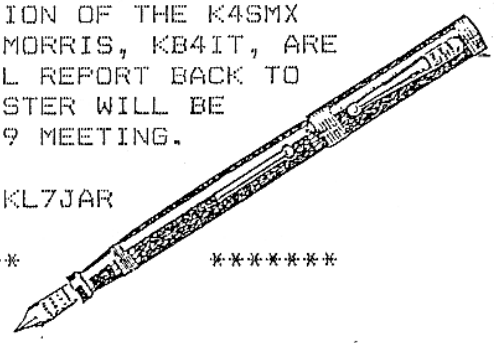
SECRETARY'S DESK

OUR LAST MEETING HELD MARCH 15 FEATURED AN INTERESTING PROGRAM ON DAVE'S, WD4RCO, DXPEDITIONS TO VP2, 8R1 AND FG0. WE DISCUSSED THE POSSIBILITY OF SEDXC TAKING OVER THE OPERATION OF THE K4SMX REPEATER SITE AT TOWER PLACE. JOHN, W4MRJ AND MORRIS, KB4IT, ARE DOING A FEASIBILITY STUDY ON THE MATTER AND WILL REPORT BACK TO THE CLUB AT THE NEXT MEETING. THE 1988 CLUB ROSTER WILL BE AVAILABLE FOR MEMBERS TO PICK UP AT THE APRIL 19 MEETING.

SANDI, KL7JAR



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ACTIVITIES

DXCC ENDORSEMENTS

KX4R	315 MIXED
K3KG	NEW 160 METER DXCC

RANDON CONTEST ACHIEVEMENTS

WN4KKN/5 3RD PLACE U.S.A. SINGLE-OP 1987 ALL ASIA PHONE

ARRL 160 METER

K3KG	(KM9P OPERATOR) TOP GEORGIA AND #6!
N4JF	TOP ALABAMA
WN4KKN/5	TOP NORTH TEXAS AND #9!

KN4B AND W4DXI ALSO SCORED WELL

CORRECTION TO LAST MONTH

DO NOT SEND ME LOGS ONLY, SUMMARY SHEETS OR SCORE SUMMARY. ACTIVITY HAS BEEN GOOD FOR THE CQ 160, BUT I NEED MORE ARRL DX REPORTS (PHONE - CW - EITHER - BOTH). I WILL ACCEPT SCORES UP UNTIL THE APRIL MEETING BEFORE PICKING THE PLAQUE WINNERS.

DAVE, K4JRB

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BITS AND PIECES

CONTEST RESULTS REPORTED FROM VARIOUS MEMBERS:

O O O	W4DXI	ARRL CW	246,840 POINTS
		SSB	206,340 POINTS
O O O	N4RJ (OPERATOR KM9P - BILL FISCHER)		
		ARRL SSB	1,556,000 POINTS
O O O	WA4FBH	ARRL SSB	1,160,000 POINTS
O O O	WX4G	CQ WPX	3,100,000 POINTS
O O O	WA4FBH	CQ WPX (15-METER SINGLE BAND)	800,156 POINTS

MIKE, K4PI

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ETHIOPIA PROGRAM SCHEDULED FOR APRIL

FOR TWO YEARS K9EG TOURED ETHIOPIA AND HAS COMPILED A PRESENTATION OF THAT COUNTRY FROM A HAM'S VIEWPOINT. IT IS HIGHLY RECOMMENDED AND SHOULD BE AN INFORMATIVE AND ENTERTAINING SHOW.

DAVE, WD4RCO

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CONTEST LOGGING

SINCE I DON'T USE A COMPUTER FOR LOGGING OR SCORING, I MAY NOT BE THE ONE TO WRITE THIS, BUT I SAW SOME INFORMATION ON LOGGING SOFTWARE THAT I FOUND INTERESTING. ONE OF THE ARTICLES WAS IN MARCH 1988 CQ. IT SHOWED THE USE OF A COMMADORE 64 FOR ON LINE LOGGING. SOFTWARE WAS FROM N4ZR. ANOTHER ARTICLE IS IN MARCH 1988 QST UNDER THE "ON LINE" SECTION. IT MENTIONS USE OF IBM PC SOFTWARE AND COMMADORE 64 SOFTWARE FOR LOGGING. ED, K4SB, ONE OF OUR MEMBERS HAS SOFTWARE HE MARKETS FOR TRS-80 SERIES MACHINES. I CAN SEE SOME TYPE OF COMPUTER IN THE FUTURE FOR MY LOGGING OR POST CONTEST LOG PREPARATION. IT IS MUCH TOO TIME CONSUMING TO KEEP RECOPYING BY HAND.

MIKE, K4PI

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MONEY talk

MARCH 15, 1988

STARTING CHECKING ACCOUNT BALANCE:			$ 2,737.42
RECEIPTS:	BADGES	$ 10.50	
	DOOR PRIZES	47.00	
	CONTRIBUTION	7.00	
	DUES	450.00	
	TOTAL RECEIPTS		514.50
DISBURSEMENTS:	DOOR PRIZES-DELTA	$ 50.00	
	DOOR PRIZES-HRO	38.22	
	W2OONT QSL CARDS	24.30	
	CLUB BADGES	10.11	
	NEWSLETTER POSTAGE	61.00	
	TOTAL DISBURSEMENTS		(183.63)
ENDING CHECKING ACCOUNT BALANCE:			$ 3,068.29

NEIL, KC4MJ

WHAT IS ELECTRICITY?

TODAY'S MOST PRESSING SCIENTIFIC QUESTIONS ARE: "WHAT IS ELECTRICITY?" AND "WHERE DOES IT GO AFTER IT LEAVES THE POWER SUPPLY?"

HERE IS A SIMPLE EXPERIMENT THAT WILL TEACH YOU AN IMPORTANT LESSON ABOUT ELECTRICITY: ON A COOL, DRY DAY, SCUFF YOUR FEET ALONG A CARPET, THEN REACH INTO YOUR FRIEND'S MOUTH AND TOUCH ONE OF HIS DENTAL FILLINGS. NOTICE HOW HE TWITCHES VIOLENTLY AND CRIES OUT IN PAIN? THIS TEACHES US THAT ELECTRICITY CAN BE A VERY POWERFUL FORCE AND WE MUST NEVER MISUSE IT OR USE IT TO HURT OTHERS (UNLESS WE NEED TO LEARN SOMETHING THAT HE WON'T TELL).

WHEN YOU SCUFFED YOUR FEET ON THE CARPET, YOU PICKED UP BATCHES OF "ELECTRONS" WHICH ARE INCREDIBLY TINY OBJECTS THAT THE CARPET MANUFACTURERS WEAVE INTO THE CARPETS SO THEY WILL ATTRACT DIRT. THE ELECTRONS TRAVEL THROUGH YOUR BLOODSTREAM AND COLLECT IN YOUR FINGERS. THERE THEY FORM A SPARK THAT JUMPS TO YOUR FRIEND'S FILLING, THEN THEY TRAVEL DOWN TO HIS FEET AND BACK INTO THE CARPET, THEREBY COMPLETING THE CIRCUIT.

AMAZING ELECTRONIC FACT: IF YOU SCUFFED YOUR FEET LONG ENOUGH WITHOUT TOUCHING ANYTHING, YOU WOULD BUILD UP SO MANY ELECTRONS THAT YOUR FINGER WOULD EXPLODE! (THIS IS NOTHING TO WORRY ABOUT IF YOU DON'T HAVE CARPETING.) IT IS SAID THAT PUTTING A THIMBLE ON EACH FINGERTIP WILL PREVENT THIS.

ALTHOUGH WE MODERN PEOPLE TEND TO TAKE OUR ELECTRIC LIGHTS, RADIOS, MIXERS, AND SO ON FOR GRANTED, HUNDREDS OF YEARS AGO PEOPLE DID NOT HAVE ANY OF THESE THINGS (WHICH IS JUST AS WELL BECAUSE THERE WAS NO PLACE TO PLUG THEM IN ANYWAY.) THEN ALONG CAME THE FIRST ELECTRICAL PIONEER, BENJAMIN FRANKLIN, WHO FLEW A KITE IN A LIGHTNING STORM AND RECEIVED A SERIOUS ELECTRIC SHOCK. THIS PROVED THAT CLOUDS WERE POWERED BY THE SAME FORCE AS CARPETS, BUT IT ALSO DAMAGED HIS BRAIN TO THE EXTENT THAT HE SPENT A GREAT DEAL OF TIME SPEAKING IN INCOMPREHENSIBLE MAXIMS SUCH AS "A PENNY SAVED IS A PENNY EARNED." EVENTUALLY, TO PROTECT THE GENERAL PUBLIC, HE WAS GIVEN A JOB IN THE POST OFFICE. HE DIED OF SYPHILLIS, WHICH ONLY PROVES THAT ONE SHOULD NEVER FOOL AROUND WITH MOTHER NATURE!

AFTER FRANKLIN CAME A HERD OF ELECTRICAL PIONEERS WHOSE NAMES HAVE BECOME A PART OF OUR ELECTRICAL TERMINOLOGY: MYRON VOLT, MARY LOU AMP, JAMES WATT, BOB TRANSFORMER, BILLY JOE FARAD, AND OZRO HENRY. THESE PIONEERS CONDUCTED MANY IMPORTANT ELECTRICAL EXPERIMENTS--AMONG THEM, GALVANI DISCOVERED (HONESTLY) THAT WHEN HE ATTACHED TWO DIFFERENT KINDS OF METAL TO THE LEGS OF A FROG, AN ELECTRICAL CURRENT DEVELOPED AND THE FROG'S LEG KICKED, EVEN THOUGH IT WAS DEAD AS A HAMMER. GALVANI'S DISCOVERY LED TO ENORMOUS ADVANCES IN THE FIELD OF AMPHIBIAN MEDICINE. TODAY, SKILLED VETERINARY SURGEONS CAN TAKE A FROG THAT HAS BEEN

SERIOUSLY INJURED OR KILLED BY A CAR, IMPLANT PIECES OF METAL IN ITS MUSCLES, AND WATCH IT JUMP BACK INTO THE POND LIKE A NORMAL FROG (EXCEPT THAT NOW IT WILL SINK LIKE A STONE).

THE GREATEST ELECTRICAL PIONEER OF THEM ALL WAS THOMAS ALVA EDISON, WHO WAS A BRILLIANT INVENTOR (DESPITE THE FACT THAT HE HAD LITTLE EDUCATION AND LIVED IN NEW JERSEY). EDISON'S FIRST MAJOR INVENTION WAS THE PHONOGRAPH (IN 1877), WHICH SOON COULD BE FOUND IN THOUSANDS OF AMERICAN HOMES, WHERE IT BASICALLY SAT UNTIL 1923 WHEN THE RECORD WAS INVENTED.

EDISON'S GREATEST ACHIEVEMENT CAME IN 1879 WHEN HE INVENTED THE ELECTRIC COMPANY. EDISON'S DESIGN WAS A BRILLIANT ADAPTATION OF THE SIMPLE ELECTRICAL CIRCUIT: THE ELECTRIC COMPANY SENDS ELECTRICITY THROUGH A WIRE TO A CUSTOMER, THEN IMMEDIATELY GETS THE ELECTRICITY BACK THROUGH ANOTHER WIRE, THEN (THIS IS THE BRILLIANT PART) SENDS IT RIGHT BACK TO THE CUSTOMER AGAIN (3600 TIMES A MINUTE). THIS MEANS THAT AN ELECTRIC COMPAMY CAN SELL A CUSTOMER THE SAME BATCH OF ELECTRICITY OVER FIVE MILLION TIMES A DAY. IN FACT, THE LAST TIME ANY NEW ELECTRIC CURRENT WAS GENERATED IN THIS COUNTRY WAS IN 1937. INCIDENTALLY, EDISON IS WIDELY CREDITED WITH THE "SMOKE THEORY" OF ELECTRONICS WHICH MAINTAINS THAT ALL COMPONENTS IN ANY GIVEN CIRCUIT REALLY OPERATE ON A MINUTE CHARGE OF WHITE SMOKE AND WHEN THE COMPONENT FATIGUES AND RELEASES ITS SMOKE, IT IS RENDERED USELESS SINCE ITS SOURCE OF ENERGY HAS ESCAPED.

TODAY, THANKS TO MEN LIKE EDISON AND FRANKLIN (AND FROGS LIKE GALVANI'S KERMIT) WE RECEIVE ALMOST UNLIMITED BENEFITS FROM ELECTRICITY. FOR EXAMPLE, IN THE PAST DECADE SCIENTISTS HAVE DEVELOPED THE LASER, AND ELECTRONIC APPLIANCE SO POWERFUL THAT IT CAN VAPORIZE A BULLDOZER AT 2,000 YARDS, YET SO PRECISE THAT A DOCTOR CAN USE IT TO PERFORM DELICATE OPERATIONS ON THE HUMAN EYEBALL (PROVIDED, OF COURSE, THAT THEY REMEMBER TO CHANGE THE SETTING FROM "VAPORIZE BULLDOZER" TO "DELICATE").

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THANKS TO K4VIZ AND THE BIRMINGHAM, NEWLETTER OF THE BIRMINGHAM AMATEUR RADIO CLUB AND K3NN, BILL BOSLEY FOR SENDING THE ARTICLE INTO SEDXC BULLETIN.

****

THANKS FOR THE MANY ARTICLES AND NEWS ITEMS YOU HAVE ALL SENT INTO THE SEDXC BULLETIN. IT HAS MADE THE TASK OF EDITING THIS BULLETIN MUCH EASIER. I APPRECIATE YOUR SUPPORT IN THIS EFFORT AND HOPE IT WILL CONTINUE.

SANDI, KL7JAR (EDITOR)

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