



Long Path



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SEMDXA NEWSLETTER

March 2018



Pres Sez

The Bouvet Island Expedition (3Y0Z) crew is safe and on solid ground. On February 17th, 2018, they landed at Cape Town, South Africa. On the web page www.bouvetdx.org/news-and-updates/ they made their last entries before heading home. Ralph – K0IR & Hal – W8HC made entries on 02/17/18 saying further entries will probably wait until they are safely home. They thanked all for the 9,000+ maritime mobile QSOs during their more than one month at sea.

With the dues increase and the 50-50 raffles, the treasury is putting on weight for our donations to the DXpeditions we defined on the SEMDXA most wanted survey.

Our March meeting presentation is from Lee, N8LJ and Stan, AC8W. They are choosing one of their past DXpeditions to re-count for our enjoyment. Coming out of a long, cold winter, I hope it will be a tropical location.

We are again looking for a program manager. Ned KD8FCB is stepping down because he is going to be less available and not attending most meetings. If anyone would be willing to step up to handle this, I know they will get a lot of help from the rest of us. I am volunteering to handle all the A/V equipment and set it up at each meeting (along with a little help from my friends). The new program manager will mostly be lining up the monthly programs. We love speakers but can not afford a lot to support them. I think we need to do some programs from videos. Let me know what you think about what our future programs should contain.

I think the new venue is working out well. Gino's staff, food, drink, and facilities are very good considering we pay nothing but our meals. As long as most of us run up a food and drink order, it appears we will have a place to meet.

See you at the meeting.
Doug N8VY

Check out **March 2018 QST**
Doctor is In on page 60

Interesting article about
Horizontal Antenna's
Elevation Pattern.

Calendar

Meeting:

2nd THURSDAY
MARCH 8, 2018

Gino's Restaurant

1999 Cass Lake Rd,
Keego Harbor, MI 48320
Google Map with directions at
[Gino's Pizza directions](#)

Gathering starts at **5:30 pm**
(dinner on you) and meeting
begins at 7 pm followed by the
presentation.

PRESENTATION

"DXpedition Presentation "

by our own **Lee Dziekan,**
N8LJ, and Stan AC8W

SEMDXA OFFICERS

President: Doug Basberg **N8VY**
Vice-president: Dave De Rain, **K8ESQ**
Treasurer: Brad Nowak, **N8SNM**
Secretary: Lee Dziekan, **N8LJ**
Program Director: Steve Culp,
K8QKY and Ned Keating, **KD8FCB**
Directors: Ted, **K8NA**, Bob, **K8VFFV**,
and Lee, **N8LJ**

Club Appointees:

Web Site Editor: Larry Gauthier, **K8UT**
LP Publisher: Marsha Fleming, **N8FE**
ARRL and CQ Appointees:
DXCC Checker: Stan Arnett, **AC8W**
DXCC Checker: Bill Jones, **N8KF**
VUCC Checker: Al Bailey, **K8SIX**
VUCC Checker: Jim Sanford, **K8ZZU**
CQ Checker: Mike Rudzki, **N8MR**

Meeting Minutes

January 11, 2018

-The meeting was called to order at 7:00 pm by our president Doug N8VY. There were 19 members in attendance.

-It was reported that SEMDXA friend K3LP died tragically. A moment of silence followed.

-Brad N8SNM reported the treasury was in fine shape. His report was unanimously approved by the membership present.

-The meeting minutes from the November meeting were approved as written in the Long Path.

-Marsha N8FE reported delivery of the January 2018 issue of the Long Path was delayed due to a computer virus. A couple of days later Marsha caught it.

-AL K8SIX reported Ted K8NA had three discs fused. He is recuperating at Beaumont Hospital.

-Pete K8PGJ will operate as ZF2PG for the NAQP SSB contest. He will also be available for QSO's before and after the contest. He requests we help keep his pile-ups big!

-Larry K8UT reports the SEMDXA most wanted survey is complete and posted on the SEMDXA website. It was interesting to note that SEMDXA list did not match the Club Log wanted list.

-Larry K8UT addressed the membership regarding a presentation of a unique method to control a band decoder. Since our association is DX oriented, our presentations are generally of a DX nature. Since SEMDXA has been in existence for many years, we have viewed most of the major dx-peditions and many minor dx-peditions. The availability of new DX specific presentations is falling short with our longevity and 9 yearly meetings.

The discussion that followed formulated that any presentation that was relevant to amateur radio, technologies of amateur radio, hardware/software, that supports working DX would be acceptable presentations. The motion was made by Marsha N8FE, 2nd by Jay WB8SBI and unanimously approved by the membership present.

-The presentation of the evening was "Dreaming" by Pete K8PGJ. He covered topics defining architectures of super stations K3LR, K3LPL, K9CT and others describing their approach to be the top scoring contest station.

Meeting Adjourned about 8:45 pm.

Respectfully submitted,
Lee N8LJ

February 8, 2018

The meeting was called to order at 7:11 pm by our president Doug, N8VY. There were 19 members and guests in attendance.

The 50/50 was one by Doug N8VY.

Brad N8SNM delivered the financial report. The motion to accept was made by Bob K8RGM and seconded by Chet VE3CFK. The report was approved unanimously by the membership present.

Lee N8LJ read the minutes from the January meeting. The minutes were accepted as read by the membership present.

Marsh N8FE is recovering from knee replacement surgery. Ted K8NA is recovering at the Woodward Hills Rehab Center room 113. Chet K8YTO is recovering from eye dilation and says hello to the members.

There were two DXpeditions considered for SEMDXA donation, KH1 by the Dateline group and 3B7A Tromelin/ St Brandon. A motion was made by Larry K8UT to support each one with a \$100 donation, and supplemented with a "pass the hat". Dave K8ESQ seconded the motion and the proposal was unanimously approved by the membership present.

It was mentioned by K8UT Larry, who spoke with NE8Z/ HC1MD, who attended a local amateur radio club meeting in Ecuador, that South American ham's using FT-8 mode are turning to LOTW for QSO confirmation. The postal costs for QSLing is getting prohibitive in South America.

Larry also had a few miniature "true" FSK modulators. If you are interested in one contact him directly.

The evenings' presentation was FreqEZ, by Larry K8UT. FreqEZ is a smart antenna selection controller with features that outweigh the commercially available units and can be built for less than half the price.

Respectfully submitted

Lee
N8LJ

Brief Description of Cheap and Powerful Microcomputers and Peripherals You Can Enjoy/Use by Doug Basberg, N8VY

There has been an explosion of new microcomputer technology at very low prices, but very high capability. There are many ways this can come into your life. I will briefly discuss three levels of use.

LEVEL ONE: Buy and Use for Various Purposes

You can buy and use many products that can automate or secure your home. These have become very popular and you can easily purchase these at 'Big Box Stores' or Amazon. You can take this all the way to handling lights, switches, alarms, cameras, door locks, garage doors. There are at least three popular modes of operation (and probably more). They usually communicate on 433 MHz, 9xx MHz, or wifi (2.4 GHz). Be careful to accumulate compatible devices. Even devices on the same frequency may use different message formats and not talk to each other. There are solutions to getting different technologies to talk to each other. There are 'bridges' to put 9xx or 433 devices onto wifi and the internet. That is very appealing except for replacing the batteries. Another consideration is whether you want to open your computer network to the 'cloud' connections many of these products use. I have read articles on how the 'Nest' thermostat and other popular home products have been hacked. The results are stolen information from computers on the home network. They got passwords, financial information, and more. That is why my system runs on the internal LAN network and not their cloud servers. Once your devices are available on wifi, you may talk to them with Google or Amazon hubs. I use Amazon Echo Dots. I have five Echo Dots, so I can say 'Alexa tree on' and the Christmas tree lights up. Pretty cool.

LEVEL TWO: Moderate Software Work

The advantage is handling some of the issues of 'off the shelf'. The security issue of opening up my network to some cloud server was important to me. I used www.itead.cc Sonoff devices for home automation. They are cheap and work well. The problem is you open your home network to a Chinese cloud service. I am not comfortable with that. If you look at some www.youtube.com videos by searching 'Sonoff' you can find out how you can reprogram the Sonoff devices with software other people have developed that does not require you to use cloud servers. That is what I am doing with the 'Sonoff-Tasmota' code. Much of this work requires you to get involved with the Arduino Integration Development Environment (IDE). Read up on this at www.arduino.cc web site. The software is at level 1.8.5 currently. This software will handle Arduino, esp8266, esp32, and more boards. Because you can search on Google or watch www.Youtube.com videos, you can prepare yourself to handle all aspects of doing what you want. Is there an investment in time and effort? Oh yes. I found it worth while. A very popular source of Internet of Things (IoT) information/software/products is www.adafruit.com.

LEVEL THREE: Considerable Software Work and Maybe Circuit Work

I am working at this level, but I am an electrical engineer that developed software for vehicle Powertrain control. I am retired now, but I actually enjoyed doing real-time control design. At this level, you may want to use a centralized control system. I use www.home-assistant.io as my central system. This software actually can work with over 700 automation products and help you integrate them into a system. The system is not easy, but it is very powerful. I use esp8266 products like the nodeMCU board (Google search this) and esp32 boards. These have built in wifi and are much more powerful than Arduino boards and cost less (\$4.50 to \$9.00). The products are getting more powerful and cheaper each year. I would recommend the esp32 for large projects and esp8266 for easier projects. The esp32 is very new and the esp8266 is established with lots of developed code. The Arduino can be considered outmoded by these.

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Conclusions, Comments, and Links

I have purchased parts from Amazon Prime and received them in two days at a small premium. When I have a few weeks to wait, I get a better price at www.banggood.cc they offer a price from their USA warehouse for a higher price or from China for a lower cost. I always pick the China price and it has never taken more than two or three weeks. I believe they often send me stuff from the USA warehouse. The esp32 board is about \$9.00 now and is very powerful with three processors and a lot of I/O. The variety of I/O devices is amazing and the prices are very reasonable. You can get motion, temperature, humidity, distance, GPS, light, sound, time, pressure, and so much more (even radar). The prices are very reasonable.

I recommend looking at www.youtube.com videos on anything you intend to get involved with. The other thing is to follow internet searches. I find the most watched videos are the best usually. Be careful of websites found in searches. It is always best to go to the original manufacturer's web site. You can pick up some nasty stuff at dubious web sites (ransom ware?).

I did this article because so many of my HAM radio friends have asked questions along these lines. I have always been a hobby intense person (flying, scuba diving, photography, back packing, electronics, computers, gardening, home-steading, woodwork, metal work, and of course HAM radio). I found many HAM operators are also heavy on other hobbies. You can have a lot of fun with these little, cheap, and powerful processors. I try to limit this pursuit just short of being divorced.

Products I have purchased lately:

<https://www.banggood.com/ESP32-Development-Board-WiFiBluetooth-Ultra-Low-Power-Consumption-Dual-Cores-ESP-32-ESP-32S-Board-p-1109512.html?rmmms=search>

<https://www.banggood.com/Geekcreit-Doit-NodeMcu-Lua-ESP8266-ESP-12E-WIFI-Development-Board-p-985891.html?rmmms=search>

<https://www.banggood.com/5Pcs-Mini-IR-Pyroelectric-Infrared-PIR-Motion-Human-Body-Sensor-Module-p-959229.html?rmmms=search>

<https://www.itead.cc/smart-home.html>

<https://www.banggood.com/3Pcs-Microwave-Doppler-X-Band-Radar-Sensor-Wireless-Module-Motion-Speed-p-1227477.html?rmmms=search>

<https://www.banggood.com/FT232RL-FTDI-USB-To-TTL-Serial-Converter-Adapter-Module-For-Arduino-p-917226.html?rmmms=search>

73 Doug

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