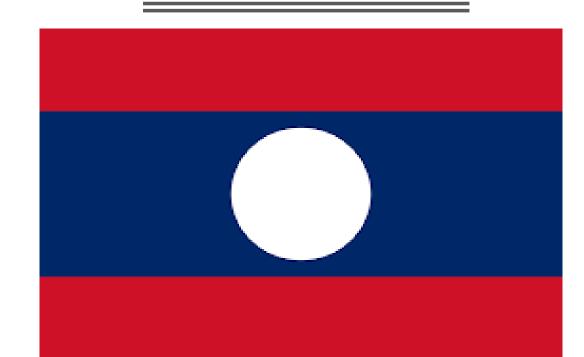
Topband DXing From The Corners of the World XW4ZW & ET3AA

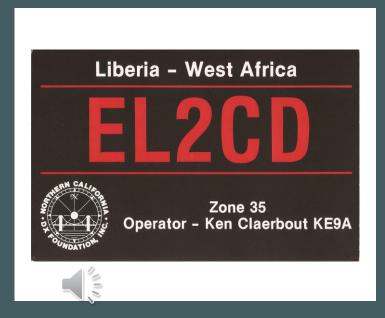
Ken Claerbout K4ZW

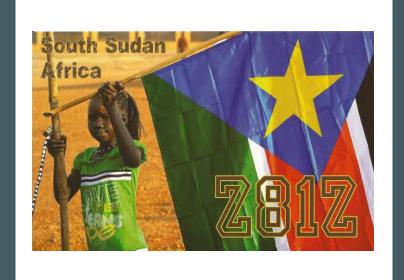




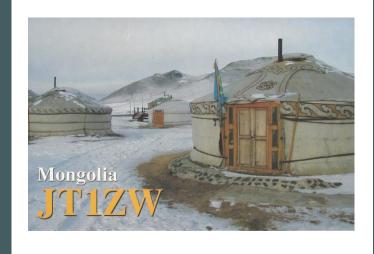
What We Will Cover This Evening

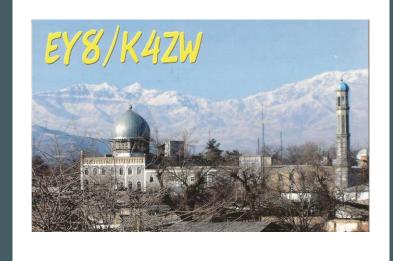
- Past Lowband Operations
- XW4ZW Lao People's Democratic Republic
- Take Aways From 3 years operating XW4ZW
- Federal Democratic Republic of Ethiopia
- ET3YOTA December 2018 Testing the Lowbands
- January 2019 Taking Advantage of the Government Furlough – New Toys To Play With!
- Youth In Amateur Radio Flourishing in Ethiopia
- Where to Next?
- Questions?

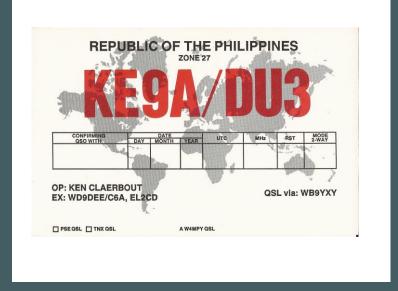












Pingxiang Burma Thanh Hoa Vietnam Gulf of Tonkir Dien Chau Muang Pakxan Udon Thani (Udorni) Thailand Phitsanulok Ban Xenu Lom Sak avannakhet Phetchabun Khommarat Chaiyaphum **Ubon Ratchath** Nakhon Ratchasima (Khorat Sara Buri Phumi 5

Lao People's Democratic Republic XW4ZW





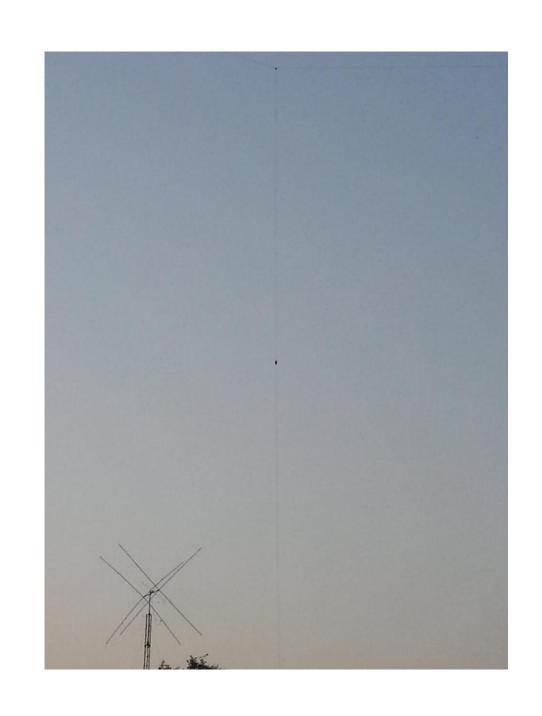
XW4ZW – January 2015

January 2015 Equipment Lineup

Transmit Antenna
Trapped Vertical
80/160 Meters
105'

DX Engineering 4-square RX Array W8JI Design

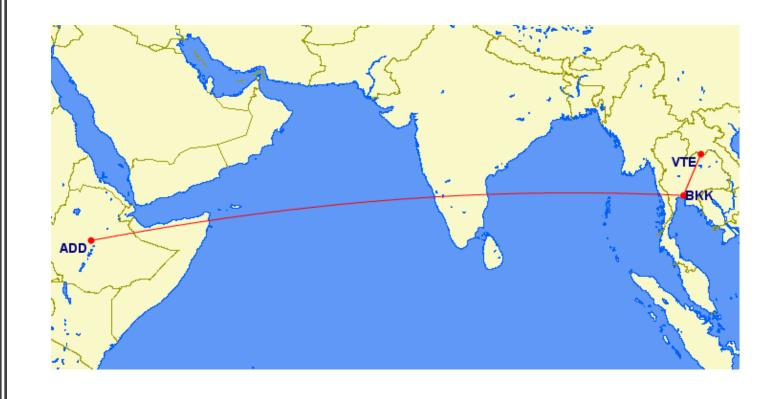
159 NA on 80 meters 14 NA on 160 meters 1947 QSO's total on 80 & 160

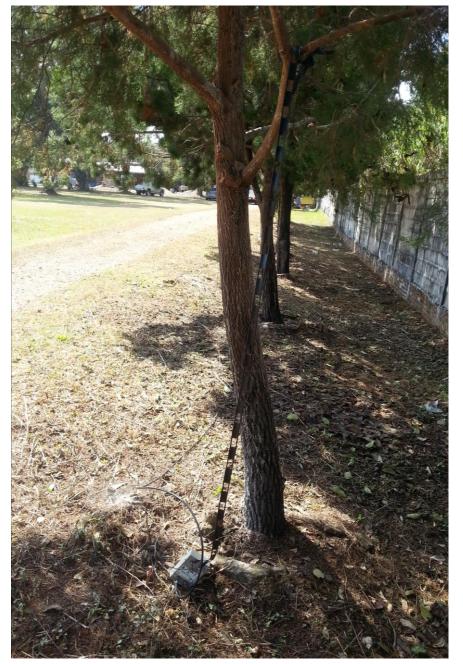


Planning for January 2016

DX Engineering RX 4-Square Needs an Overhaul

December 2015 ET3-HS0-XW-HS0-ET3 (9000 miles) in 3 days





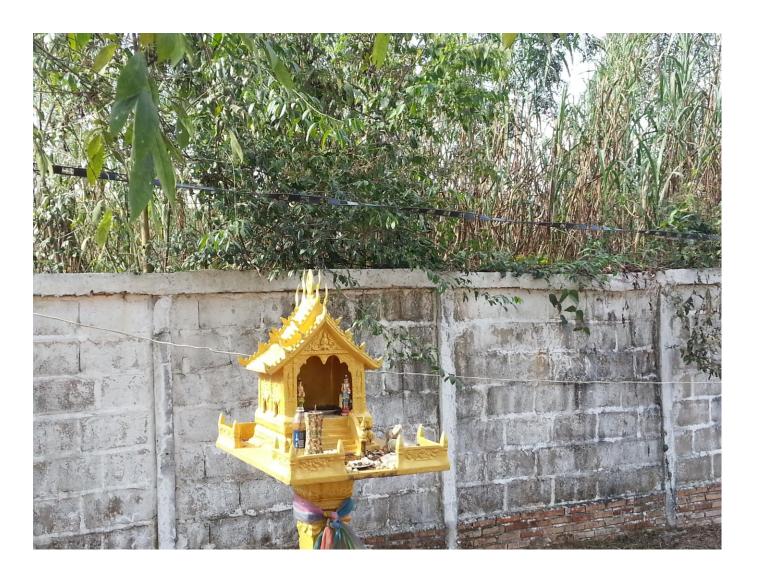


2016 Improved RX Antennas Overhauled RX 4 Square South Beverage





Spiritual Help DX Gods?



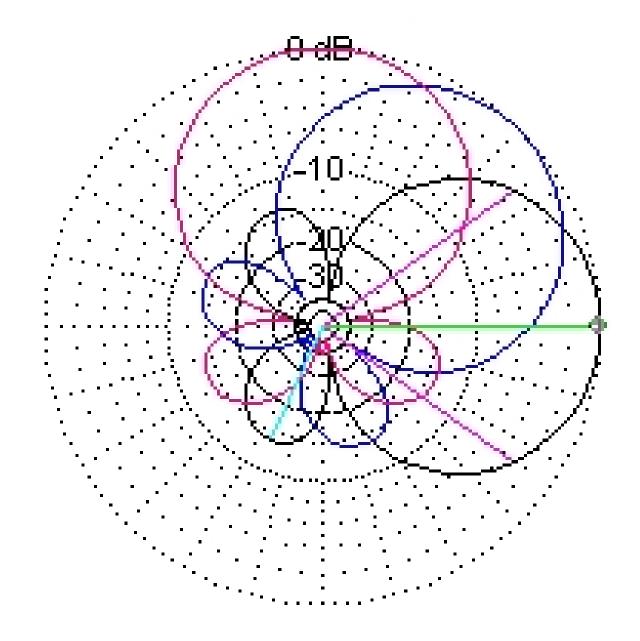






Hi-Z 4-8 PRO 8 Element Circle Array - 2017

Why Change Antennas?



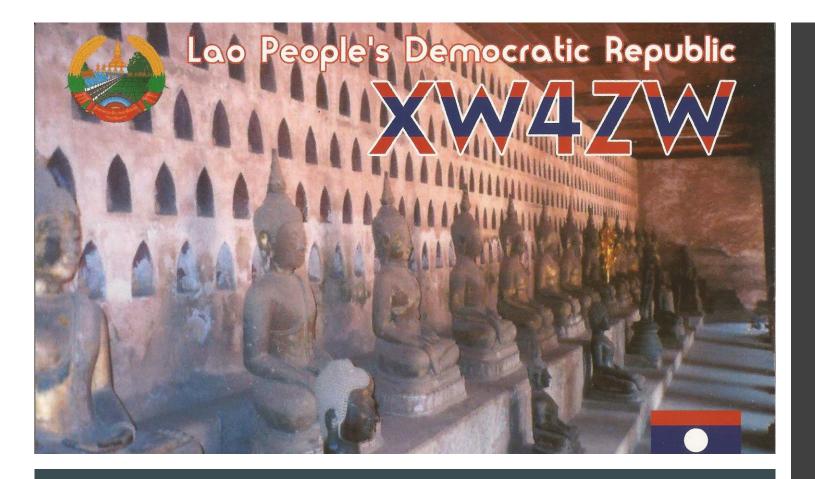
QUIET QTH











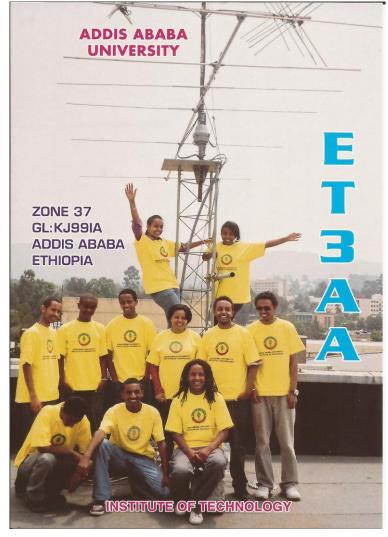
Take Aways

- Very quiet QTH
- Signals are very weak "Like fireflies in the mist" on 80 & 160
- Even working JA's can be a challenge [2600 mile path (4200 km)]
- Clearly people were hearing the signal from XW better than could I could hear them. It's a Bad Feeling!
- K9LA's Webinar at QRZ.COM – XW4ZW
- Diminishing Returns

Federal Democratic Republic of Ethiopia







ET3AA/ET3YOTA Addis Ababa University – Institute of Technology

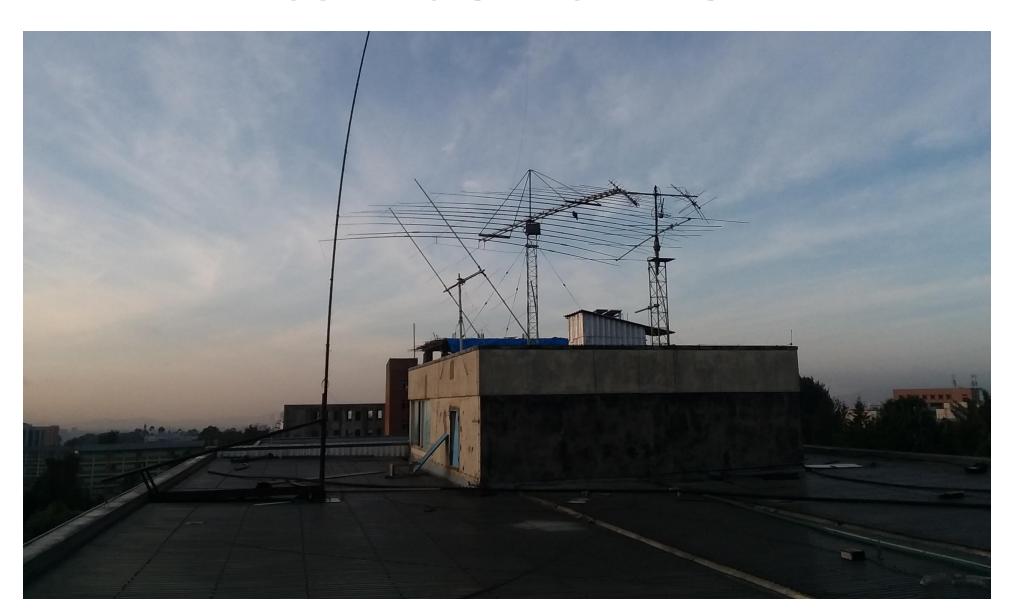
ET3AA was established at the Addis Ababa University, Institute of Technology in 2011 by Sid May ET3SID (SK)







Antennas At ET3AA



ET3Y0TA December 2018

Celebrate YOTA Month with the ET3AA crew

Proof of Concept for lowband operations from the station

Can we get permission to stay overnight?

Can we install a transmit antenna that will work?

Can we hear anything through the noise?







Departing For Addis Ababa



80/160 Meter
Transmit Vertical









Lowband Proof of Concept

Permission to Operate Overnight

Suitable Transmit Antenna

Receiving – City Noise

















January 2018
Government Shutdown
Escaping Washington







Phasing a Pair of DX Engineering DXE-ARAV3-1P Active Verticals

DX Engineering RF-PRO-1B®
Active Magnetic Loop Antennas

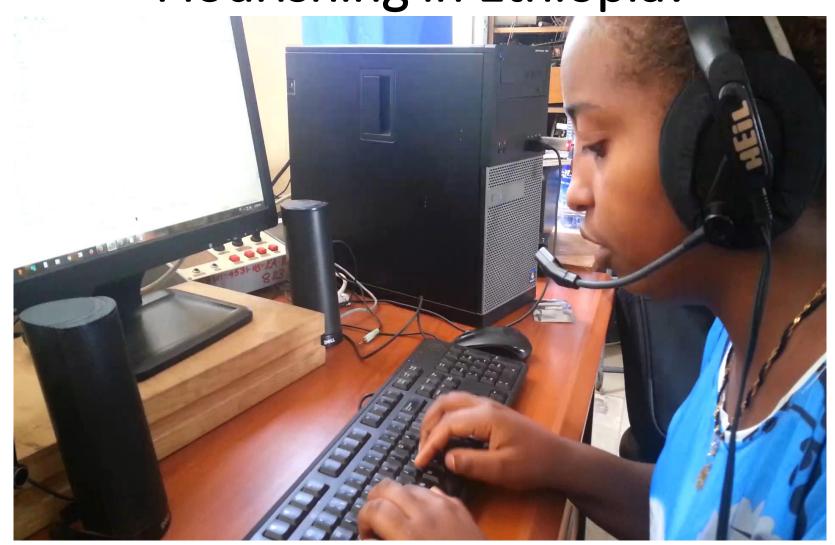


Did It Work?





Youth In Amateur Radio Flourishing in Ethiopia!

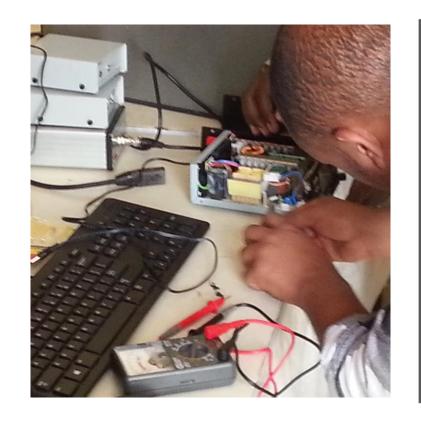




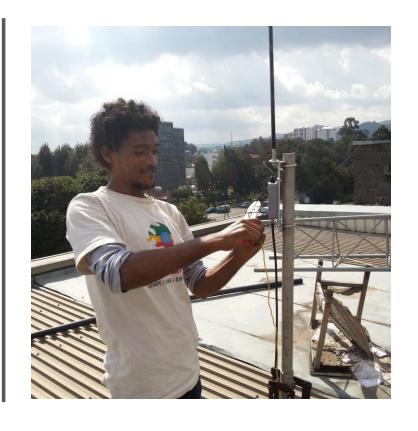




Celebrating Achievements







Reverse Beacon Network (RBN)

YOTA 2016 Austria - 110 youngsters from all over Region 1!

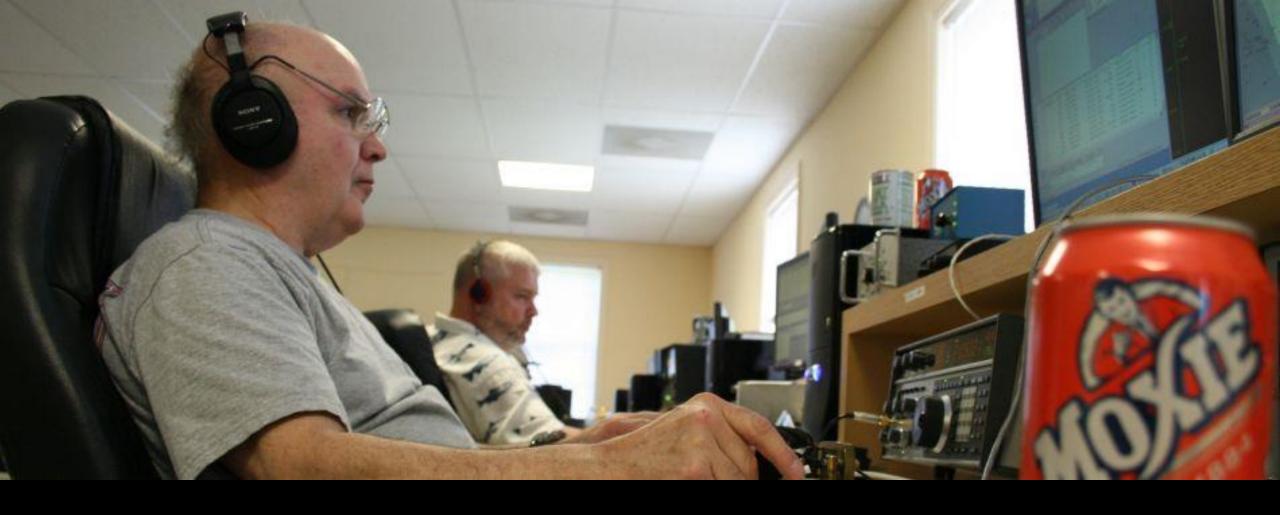
- Forge international friendships
- Experience a range radio activities
- Antenna building
- Portable operation
- Direction finding
- Kit building (WSPR)
- Operating the special event station
- Local tourist attractions
- Cultural events
- Amateur Radio on the International Space Station (ARISS)





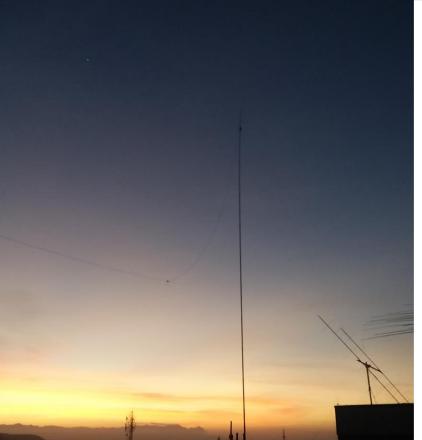


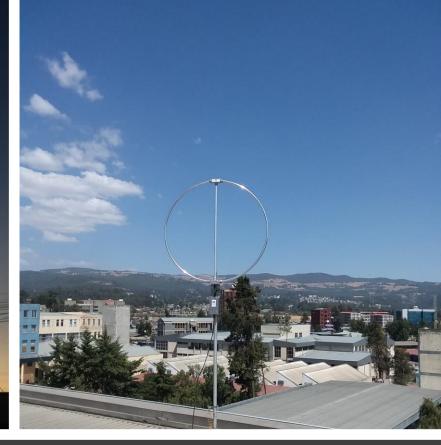
Where Next?



In Memory Bill De Lage K1SE (a.k.a Kareem)







Questions?