Eastern Iowa DX Association

An ARRL affiliated club - Established 1975

In this issue

April 2018

President's Propagation, Pontifications and Prognostics

Joe Hungate
K8OM

I'm sure you all want to join me in welcoming Glenn – WØGJ and the entire 3YØZ team home from a valiant and harrowing effort to activate Bouvet Island and bring many of us an ATNO!

Glenn will be providing the

Club Officers:

President:

program at our April 13 EIDXA club meeting with lots of photographs and recounting the teams trials and tribulations of being so close yet so far away. More information on the upcoming EIDXA club meeting can be found at http://eidxa.org /Meetings/Meetings.html and in this newsletter. Also, Glenn has written a “teaser” article in this issue of the newsletter on the 3Y0Z DXpedition which should certainly pique your interest! This is a club meeting you certainly won’t want to miss.

With the ever increasing cost of conducting major DXpeditions (approximately $750K for the Bouvet Island DXpedition plus personal expenses), and with DXpedition team members being placed in extremely dangerous situations while taking up position and surviving in many rare entities due to extreme weather conditions, political instability or unfriendly native people and / or animals, it appears the future landscape of DXpeditions as we know them today are destined to change in the not too distant future? Also, the rapid development and deployment of new digital communications technologies in amateur radio may be reducing the need for deployment of highly skilled radio operators and high powered stations for some DXpeditions.

Joe Hungate K8OM

Vice President:
Rick Hadley WØFG

Secretary:
David Christ KØLUM

Treasurer:
Mike Nowack NA9Q

Repeater Committee:
Jason Joens NRØX

Membership Committee:
Jim Spencer WØSR
Tom Vavra WB8ZRL
Nelson Moyer KUØA

Packet Cluster:
WB8ZRL.no-ip.org:7300

Repeater: NØDX/R
144.59 / 145.19 (tone 192.8)

www.EIDXA.org

Web Master:
Craig Fastenow KØCF

Newsletter Editor:
Bob Lee WØGXA
rclee2266@gmail.com

Facebook EIDXA

In the coming days I'll post a few survey questions to get your feedback and thoughts on what you believe the future of DXpeditions will look like over the next decade or so. I think we all know some degree of change is inevitable due to escalating costs along with geopolitical and environmental issues, but how do EIDXA members see the evolution direction of DXpeditions.

I'll post several survey questions and present the results at the April 13 EIDXA club meeting. I don't claim to have a comprehensive list of all of the questions and issues that the DX-world will be challenged with over the next decade so after you see my initial set of survey questions please look into your crystal ball and feel free to send me your thoughts, questions and concerns so we can get club member feedback on those as well.

The purpose of this exercise is to not only have fun with it but hopefully better prepare us for the inevitable changes and maybe even help influence change in the right direction at ARRL and FCC.

Thanks for all of your support and hope to see everyone at the April 13 EIDXA club meeting. Now, get out there and work a new one!!

73, Joe – K8OM

Musings from the lunatic fringe

Bob WØGXA

As I looked at the pictures taken by Jeff Jolie, NM1Y, during his southern Atlantic "cruise", I was reminded how birds and other animals have adapted to their environment. It also struck me how difficult it is when you've not adapted to the environment to get to Bouvet, land and live on it for two weeks. Nature is fighting you all the way.

I had the privilege last year to write an article about 3YØZ to assist with fundraising. The planning for such a trip is immense. I imagine equally immense is the disappointment of being so close and yet so far. I'm sure we'll all be watching to see how the story unfolds in the coming months.

I may have gotten carried away with newsletter content

Three long DX articles and next thing you know, we're over 100 pages. For your own safety and the safety of those around you, please exercise caution in reading this edition.

Enjoy - Bob

Club News and Administrative Items

Minutes of the EIDXA meeting January 19, 2018

President Joe K8OM called the meeting to order at 7:30 PM.

The 24 attendees introduced themselves.

Motion to approve minutes from the last meeting passed.

Mike NA9Q presented the treasurer's report. About 20 members have yet to pay their dues. Motion to approve passed.

The audit committee will meet for the annual audit in a few weeks.

DXpedition funding

- All funding comes from the general fund first. It can be matched up to 200% from the Tom Hise fund.
- We have given $2000 to 3YØZ Bouvet Island. It is number 2 on needed list and has a top score of 140 in the EIDXA ranking system
- Spratley Islands 9MØW, Saint Brandon Archipelago 3B7A, Mellish Reef VK9MA: all scored low. The DX funding committee met and recommends that we only consider Baker Island KH1/KH7Z and Ducie Island VP6D for funding.
- We have already contributed $500 to Baker Island but it is number 4 on the wanted list. Ducie Island is number 27.
- Glen WØGJ is unaware of any other major DXpeditions on the horizon.
- Committee recommends an additional $500 ($250 general fund $250 Hise fund) for Baker Island for a total of $1000. Ducie Island $200 ($100 general $100 Hise).
- Motion to accept committee recommendation passed

Tom WB8ZRL reports that the DX cluster has been up for 22 months and has users from all over the world.

Craig KØCF says he tries to update the website every Sunday with new DX information. The group indicated their appreciation with applause.

Motion to continue to have Iowa Solutions continue to host EIDXA website passed.

Repeater Committee is now Steve NUØP and Jason NRØX. The application to make Steve the new repeater trustee is being filed.

Since all repeater antenna work has been completed it appears that the $200/year insurance policy is no longer needed. It can be reinstated in 24 hours if it is needed again. Motion to let policy lapse passed.

Club Banner

- On display at entrance to meeting
- WØGJ is taking one to Bouvet. Hope to have it signed.
- Will try to get it to Baker and maybe Ducie.
- One is available for purchase at $42.83
- Additional banners can be obtained with one week lead time.

New member Jonathan KDØVVH was voted in.

Gary KØGT won the door prize drawing for an ARRL calendar.

Meeting adjourned at 8:03 PM

Programs were:
Mike PJ4/NA9Q — Holiday style operation from Bonaire
Rick NØYY — New transceiver technology
Thank you, Mike & Rick - Ed.

Submitted by David KØLUM secretary

NEXT MEETING

April 13, 2018

Program: Glenn WØGJ - 3YØZ Saga
-or-
As Paul Harvey would say: "...and now, the rest of the story"

Mercy Medical Center
Hall-Perrine Cancer Center
(location)

Social Hour 6:30 PM
Meeting & Program 7:30 PM

Card Checkers

We have three club members who can check your QSL cards

- Tom, WB8ZRL
- Glenn, WØGJ
- Mike, NA9Q

Contact info can be found here: http://www.arrl.org/dxcc-card-checker-search

---

Packet Report

Tom WB8ZRL

I am building a new computer for the packet cluster node I am running. I have been running the current software since July 2004, and the current computer since June 2010. It has run almost continuously since I brought it online. I last booted and started the cluster software on March 24th 2016, almost two years as I write this. I cannot even be sure that the computer will still boot. Things have changed since I configured the last computer. I administer the software using command lines, much like the old DOS PCs. Current Linux systems are getting away from that and now are all GUIs. So I am plodding along and hope to have a working system soon.

I don't know why, but I see lots of strangers logging onto my node. There are a few web sites with lists of nodes and their url's and port numbers, so I know how they get here. Some stay for only a few minutes, and others for several hours. A few keep coming back.

Below is a list of the calls that logged on during January and February:

2E0KDI	G8DNH	K9BOJ	KZ4P	ON3KVL	W2EQX
6Y5SJ	GW6TYO	K9HKS	LA5SJA	PA0AMR	W2RAD
AC0XY	HB3YXE	KA9CFD-10	LZ2WO	PD2WDB	W3JJI
AC8GD	HB9ADJ	KA9CFD-2	M0ELS	R9XM	W4IEN
AI6OI	HB9BGG	KC0AKY	M0RJV	RA0T	W4LVH
AK0M	HB9BUN	KC3GUU	M0XCJ	RW3AVJ	W5KLF
AK4O	IU4FKH	KC4JD	MW6KVO	SP7JJE	W7ZAC
DH2ID	IZ0TKC	KC5NMR	N0AMI	SP7WT	W9BHI
DH8KN	IZ1GZC	KC8MXW	N0EEM	SV1AIQ	WA3GGM
DL6ZOD	IZ4G0L	KD8UZJ	N0NC	UA1CCB	WB0WIV
DL9ECA	K0CF	KE9NS	N0SFH	UR5TM	WB4UHW
DM2LL	K0FA	KF4ETS	N0UBL	UT3MK	WB8DX
EA2BJS	K0TAZ	KF4HR	N1EKO	UX77QL	WB8ZRL-2
EA4GUW	K0VM	KF5OUZ	N2MDX	VE2YI	WB8ZRL-3
EA5AIH	K1KD	KG7OG	N3EVW	VK7CC	WX4US
EA5ZN	K1TTT	KI4UZI	N9UV	W0AWL	YO3GCI
EA7IEZ	K2TGW	KI7AAR	NR0X	W0FG	ZL4AD
FM5EB	K4FX	KJ9I	NR7J	W0MJN	ZS6PJH
G0AQL	K4RH	KM4SFF	NX3Z	W0MJN-1	
G6LTT	K6AFW	KT5U	NX9G	W0MJN-2	
G7OAE	K8OM	KX4U	OE1RES	W0SR	

QST QST QST

2018 ARRL Midwest Convention
The First Annual Midwest STEM TechFest

August 4 & 5, 2018

Cedar Rapids, Iowa

Hosted by the

Cedar Valley Amateur Radio Club

In Cooperation with
The American Radio Relay League (ARRL), Iowa STEM,
Institute of Electrical and Electronics Engineers (IEEE),
Makers, Radio Control Clubs, Drone, Rocket & Balloon Clubs,
Boy/Girl/Venture Scouts and 4-H Clubs,
Rockwell Collins Amateur Radio Club, Eastern Iowa DX Association, Amateur Radio Satellite Corporation (AMSAT),
Amateur Radio Emergency Service (ARES), Quarter Century Wireless Association (QCWA),
Collins Collectors Association, and
Midwest Amateur Radio Clubs!

Many Door Prizes! Fun for the whole family!

Save the Date!
August 4 & 5, 2018

Convention Chair: Tim Busch, N0CKR@ARRL.net

www.ARRLMidwestConvention.org
Info@ARRLMidwestConvention.org

Member Spotlight

New Member

Jon Ahlrichs - KDØVVH

Jon's Office *Photo: KDØVVH*

I've been an over-the-road truck driver for over 35 years; running loads from coast-to-coast.

I first got interested in ham radio by exposure first to CB radio and then moving to CB SSB. First license was June 2013 as a tech followed by an upgrade to General in November of that year.

In my "office" I use a Yaesu 857D HF radio. My home radio is the Yaesu 1200. I have a 40' tower with wire antennas for now. Maybe this will be the year for a beam.

So far, my country count sits at 45.

My XYL is Brenda and we've been married 31 years.

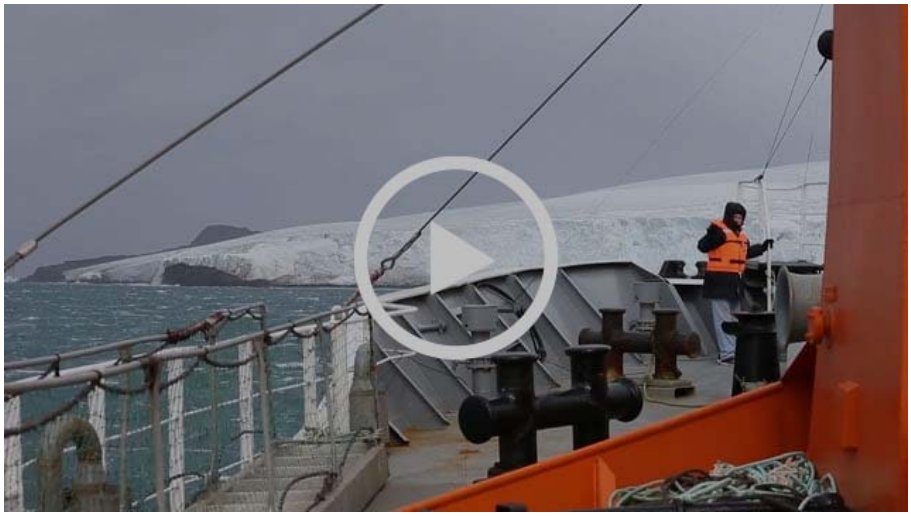
Welcome Jon! - Ed.

DX News

Bouvet Island on Feb 3, 2018 when the weather cleared *Photo: KØIR*

The same day they had to abandon the mission

So close and yet so far...



Let's hear from our very own, Glenn Johnson...

Bouvet 2018

A successful failure

Glenn Johnson, WØGJ

Photo credits: EY8MM, KØIR, WØGJ & ZS1S

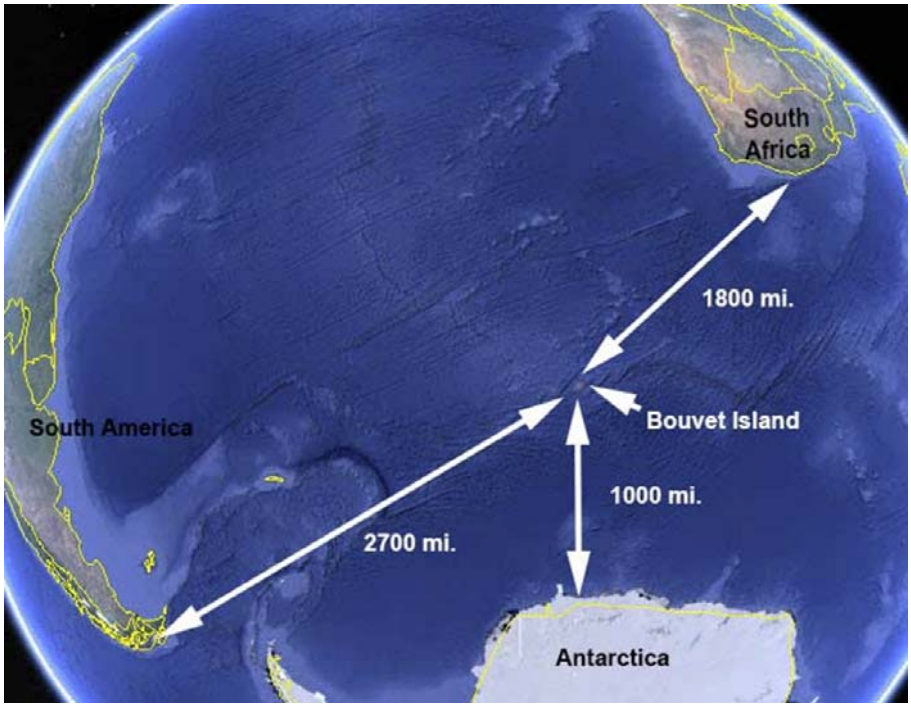
Apollo 13 launched on April 11, 1970, 48 years ago. It seems like yesterday, at least for me. Apollo 13 was supposed to be the third moon landing mission.

“Houston, we have a problem!” was heard when the spacecraft was about 200,000 miles from earth. An oxygen tank had exploded, crippling fuel cells and damaging other equipment resulting in very limited power and almost no heat or water. Literally, with duct tape, baling wire and a lot of ingenuity, Apollo 13 managed to return everyone safely to earth after a sling-shot maneuver around the far side of the moon. If that wasn’t enough, during re-entry, the radio/data blackout lasted two minutes longer than predicted, starting fears that the capsule had burned up. Apollo 13 had the full support of a huge NASA team/network, as well as heart-felt support from everyone in the world.

Bouvet 2018 could be renamed
"Bouvet 13"

It was many years in the planning with an incredible team. It had the backing from some of the best suppliers in our industry (DX Engineering, Flex Radio and ACOM). It had the support from the entire world, with donations from every DX club and group in the world, as well as individuals in literally every country on the globe.

Bouvet is an extremely remote island and was the last real estate on earth to be claimed by a nation. Norway claimed it in 1927, just over 90 years ago. There have been only a few very limited DX operations from Bouvet making it #2 on The Most Wanted list for DXCC.



Bouvet: The most remote island on earth

Planning a DXpedition to the world's most remote island and DXCC entity took over three years of meticulous preparations. The Chilean vessel, the 210-foot M/V Betanzos, built in 1973, had been completely re-engineered and refurbished. It spent two years in dry-dock, being converted from an Antarctic fishing and processing vessel into a specialized vessel to service the many logistical needs of Antarctic bases. Included on the vessel are two new heli-decks for two helicopters. The 1200 hp diesel engines and drive train were completely overhauled. The Betanzos left dry dock in early December 2017, about a month behind schedule. The Bouvet DXpedition was the first voyage of the newly outfitted ship.

Our 40-foot container with approximately 17 tons of gear, including generators, radios, amplifiers, antennas, masts, camp infrastructure and personal gear left Atlanta, GA, in early October and arrived in Punta Arenas, Chile, two months later. After clearing customs, all of the gear was transferred into two 20-foot containers on the Betanzos. These two containers are permanently mounted to the deck, under the forward heli-deck.

Most of the 20 3YØZ team members arrived in Punta Arenas, Chile, on January 10th, with a couple exceptions. Nodir, EY8MM, arrived almost 10 days before to work on his visa requirements. Hawk, SM5AQD, missed a connecting flight in London and arrived a day

later… without his luggage. He was able to re-supply some of his personal items, but, as fate would have it, one of his two checked bags eventually did meet up with him.

Thursday, January 11, was mandatory training of ship systems, emergency procedures and CPR/medical training. Friday morning was more emergency training, including survival suit training, in the cold water of the Magellan Straits. The afternoon was fire training, with hands-on live fire hoses, and various fire extinguishers with different kinds of fire. This was a mandatory requirement due to the length of time we would be on the vessel.

Glenn WØGJ, floating aimlessly in the Magellan Straits while modeling the latest in survival suits

The original plan was to board the Betanzos on Saturday, January 13, and set sail as soon as all supplies were on board. Because of the delay in leaving the dry dock, DAP had crews working 24 hours a day preparing the vessel. The vessel, however, had not received the final mandatory inspection and sea tests by the Chilean Navy.

M/V Betanzos, 236 feet long, 41 feet wide, Gross tonnage 1438T, built in 1973

DAP, the company who owns the Betanzos, is a consortium that has a small airline that serves southern Chile and the Antarctic continent, a medical evacuation service with a fleet of helicopters, and now a ship to service the Antarctic bases. DAP is the acronym of it's founder, Domingo Andres Pivcevic. Today, DAP stands for Developing Antarctica Projects. *(an article from the MercoPress)*

Our original plan several months back, was to fly the team to King George Island and board the Betanzos there. We would then sail directly to Bouvet, with two objectives: arrive at Bouvet earlier and avoid sailing through the notorious Drake Passage. As it turned out, planes had been grounded for nearly a week on KGI because of dense fog. Also, the ice pack this year was much more dense than predicted making it impossible to pre-position the Betanzos near KGI.

Chile, like the rest of the world, is not immune from project delays and government bureaucracy. The inspection and certification at sea was finally accomplished on January 18. One week after our scheduled departure, we boarded the Betanzos as the final supplies, generator fuel and helicopter fuel was loaded on board. This was a total of about 90 55-gallon drums.

Our survival craft and only some of the fuel barrels

As we set sail in the Magellan Straits, there was a brisk wind, but the seas were calm with a lot of sunshine. This nice first day out we were finally allowed access to our containers. We sorted and staged our infrastructure and equipment for best deployment.

As soon as we entered the Atlantic, we were at the mercy of the notorious Drake Passage and Antarctic Convergence Zone. It took about 12 days to travel to Bouvet, but the trip was not without some days of hurricane force winds and 30-40+ foot seas. Many days we were not allowed out on the deck itself. We saw many icebergs. We passed very close to South Georgia on a fairly clear but windy day.

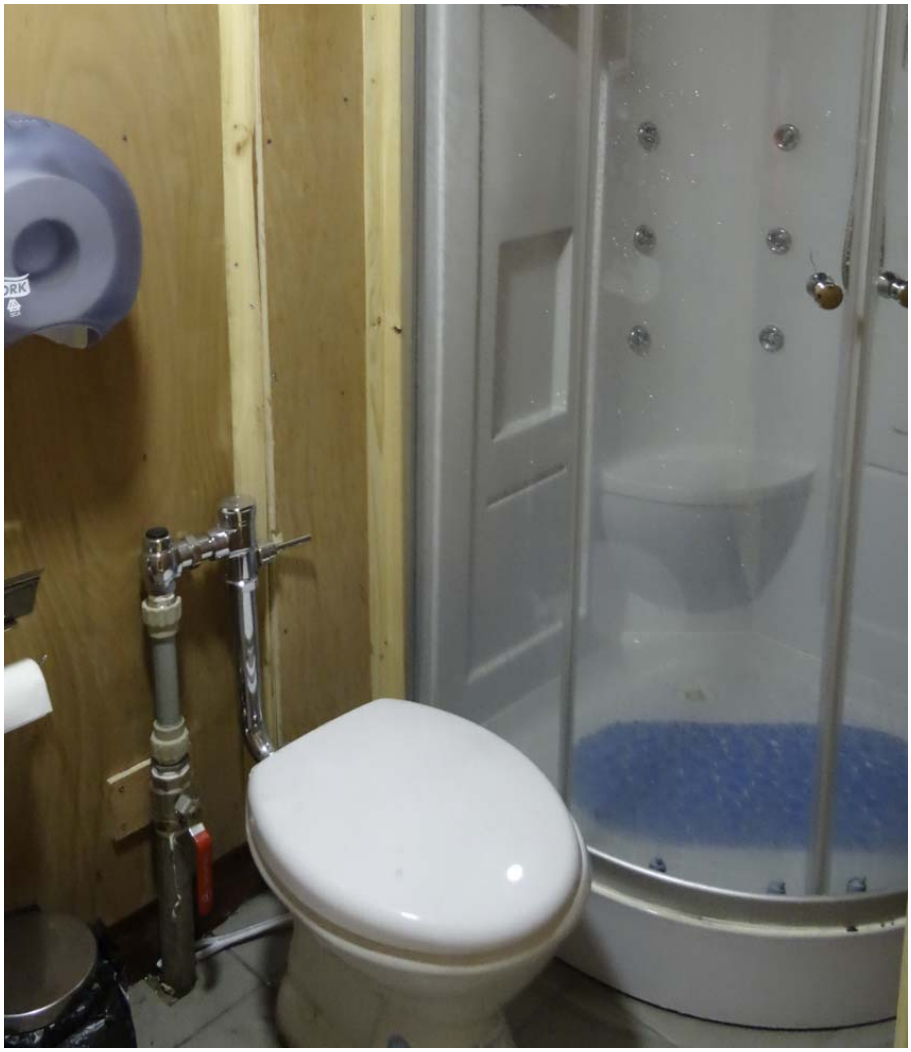
South Georgia, Ernest Shackleton's final resting place

One of the MANY icebergs near Bouvet

Many of us got to know our toilets quite intimately. I probably knew my porcelain friend better than anyone else! Many times the ship would roll 30-40 degrees for a total of 60-80 degrees. I lay in my bunk, almost standing on my feet on the foot of the bed, then within two seconds I would be almost standing on my head at the other end of the bed. As I "lay" there in my bunk, I was suffering from "carpet burn" from sliding back and forth on my bed. I swear, I have the cure for this: Velcro pajamas. The only problem, would be getting out of

bed to talk to my porcelain friend.

As a doctor, it probably doesn't help to understand the finer points of how the human body works and why we can suffer from motion sickness when it's happening to you - Ed.



My special friend

We had 70-80 kt winds when we arrived at Bouvet on February 1st. We were in radio contact with the five Norwegians at the weather station on the SE side of the island. They were reporting 40-50 foot breakers below them. We were on the opposite leeward side of the island and were unable to use anchors the first day. The largest iceberg we saw on the trip appeared to have grounded itself about three miles east of Bouvet. The part above water was nearly ¾-mile long! We were able to use our anchors on the second day but had to pull up anchor on the third day as the winds picked up again.

We were up and very close to Bouvet at times. It is a very beautiful

spectacle, when there is no fog. There is NO beach anywhere. There are either rock cliffs or glacier cliffs without any place to land by boat. One can see the wind howling across the glacier in the upper areas. The sun can shine (for a few minutes) and within 30 minutes it can be raining, snowing or very foggy. Usually all three. My overall impression is that Bouvet is an extremely hazardous and dangerous place that is perpetually VERY windy. It is very foreboding shrouded in fog most of the time.

Morning of Day 2. Note fog on coastline and up on glacier

This picture taken from same location, 30 minutes later

Bouvet: A very hostile place without easy access onto the island

This “angry face” did not want us to step onto Bouvet!

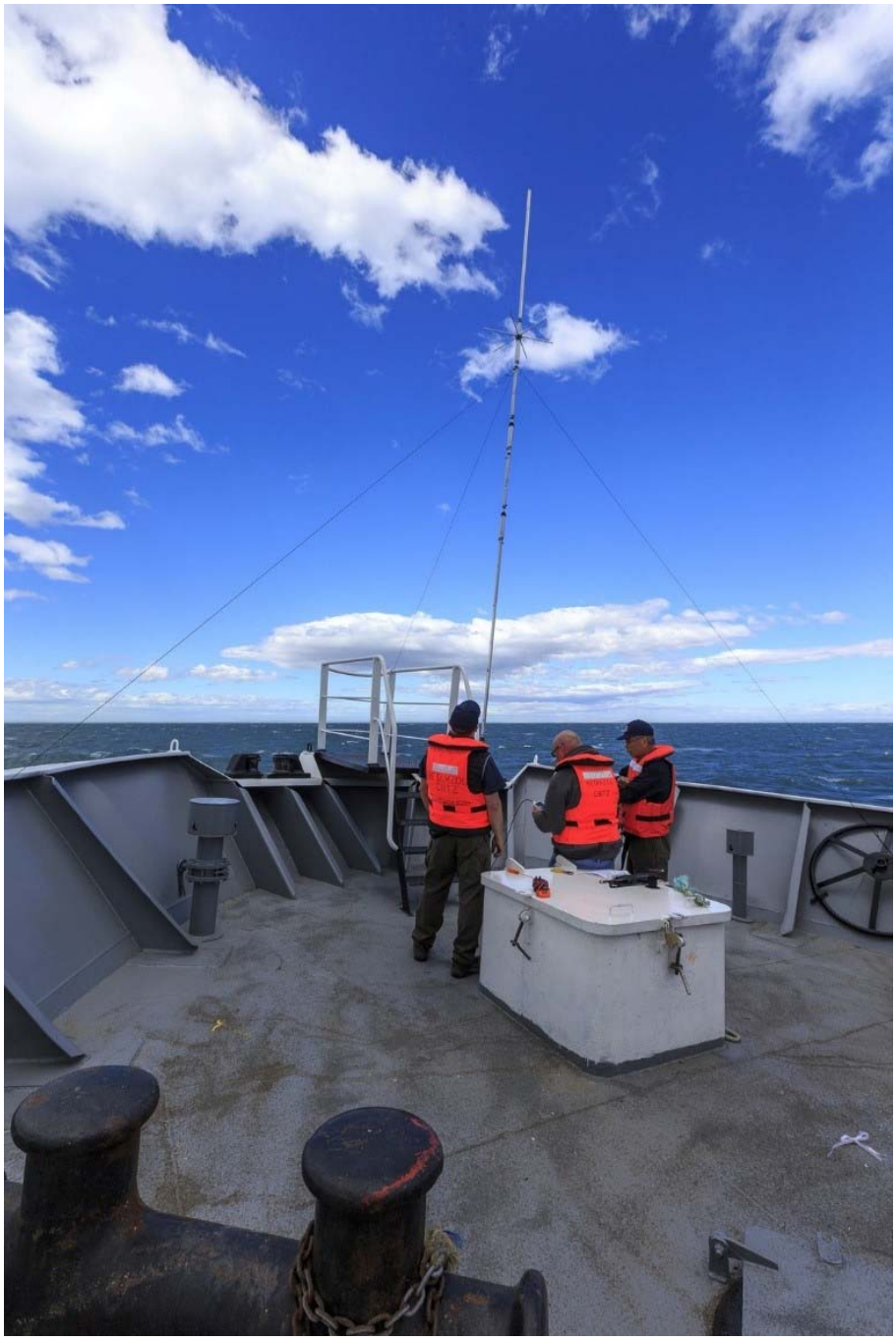
For two days fog and clouds again obscured the island. During short weather windows the ship moved along the east coast of Bouvet to assess landing possibilities until nightfall. The third night all hell broke loose. Winds were 60 to 70 knots and the sea was very angry. The ship rolled up to 30-40 degrees to port, then starboard. Anchorage close to the island became difficult and dangerous. The anchors were not holding position. The captain's weather forecasts predicted worsening conditions for the next week. After a coupling in the drive train of the starboard engine failed, the captain declared that the DXpedition could not be carried out safety and made the decision to abort the mission.

On February 3rd, we awoke to a pristine island in the sun *(first picture of article)*. But the captain had made his call. By happenstance or divine intervention, the captain's call may have averted disaster. Had the mechanical failure occurred after some team members had landed on Bouvet, the outcome of this project may have been disastrous if we were unable to maneuver around icebergs or to maintain position and have the wind push us away from Bouvet, leaving anyone on the island stranded.

With only one engine operating, we initially set our course westward to return to Punta Arenas, Chile. The oncoming seas (current) and strong westerly headwinds was difficult with a single engine. We made very slow progress, and returning to Chile would take many weeks. In the interest of safety, the captain then changed course for Cape Town, South Africa. Not only was Cape Town 1000 miles closer, but was generally downwind and with the current. We would also avoid the foul weather and ice that lay between Bouvet and Chile.

After slogging along at 3-4 kts for 14 days, we were welcomed to Cape Town by the local hams who sailed out into the harbor to meet us, blasting "CQ" on the horn of their 32-foot ketch. After a long and disappointing 31-day journey in the cold South Atlantic, the 20 sea-weary members of the 3YØZ team were ready to set foot on land. Once on land, it still took 2-3 days before the ground stopped moving and the bed stopped moving. Hurrah for Velcro pajamas! Oh, wait, the bed wasn't really moving!

During the voyage, we had one station (sometimes two) on the air. We made over 10,000 contacts as 3G9A/mm, the majority using FT8.

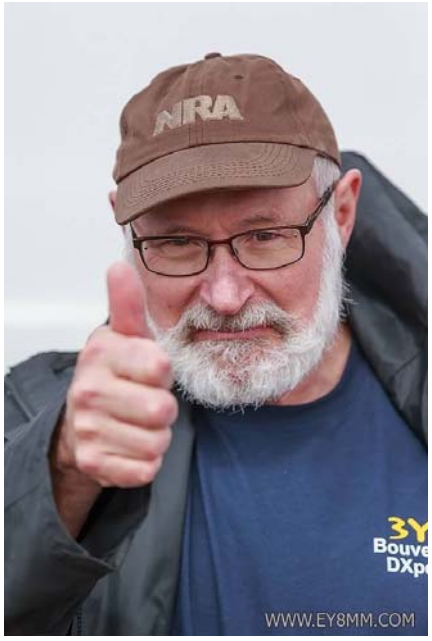


Hustler vertical on the bow of the Betanzos. Another antenna was an OCF dipole suspended from above the bridge.

3G9A/mm using a Flex 6500 and Maestro in the Betanzos' ham shack. Over 10,000 contacts were made using a lot of FT8.

As I write this in mid-March, the Betanzos is still in Cape Town undergoing repairs. It will take about a month to return to Chile. Then it will take some time to reverse the course of our gear back home: unload two 20' containers into our 40' container, clear customs, and make the voyage back home. Once we have everything back and have settled things financially with DAP, it will be full steam ahead for Bouvet 2.0 planning. Remember, Apollo 14 was very successful! Most of the team is planning on Bouvet 2.0.

Like the crew of Apollo 13, they were so very close to the moon, yet so far. And so today, Bouvet still remains as #2 Most Wanted on the DXCC list, very remote, very dangerous and a very difficult entity to activate. We were so very close, yet so far away.



Bouvet 13

"I'll be back"

---

per·se·ver·ance

ˌpərsəˈvirəns
noun
steadfastness in doing something despite difficulty or delay in achieving success.

I highly recommend you read the story of Ernest Shackleton and his Imperial Trans-Antarctic Expedition, 1914–17. A great story of perseverance. - Ed.

In other DX news...

Republic of Equatorial Guinea – Annobon and Bioko

October 9 – November 12, 2017

http://www.lral.lv/3c0l_3c1l/

Kaspars YL3AIW and Yuris YL2GM

Hello friends!
Thank you all for supporting and following our expedition, this is our story and we hope you will enjoy reading it.

At the beginning I intended this expedition to be a relatively quick reconnaissance expedition with a two-man team and with the main purpose to collect information and make new contacts for a larger expedition in future. The aim of this reconnaissance expedition was to get to know how to acquire operating licenses and to find possible QTH positions, to get familiar with living conditions and more, and of course, if possible to work on the air as well. In the end, this turned out to be much more than that.

TEAM	EQUIPMENT
Operators: YL2GM and YL3AIW	Transceivers: 2x Elecraft K3
Coordinator: Kaspars Pētersons	Power amplifiers: SPE Expert 1.3K-FA and Juma PA1000
QSL manager: YL2GN	Antennas:

Graphic designer: YL2KA

Webmaster: YL2VW

Technical advisors: YL2KL, YL3DW

160/80/40/30m bands – 18m high vertical with capacity hat

20-10m bands – Folding antenna

30, 20, 15m bands – small vertical

Beverages for receiving

Sunday, October 1st

On a very late Sunday night, after a couple of months of preparations our DXpedition journey finally begins, with my daughter and son-in-law driving me to Riga for plane to catch next morning. Our car is completely loaded with bags and equipment leaving space for just the three of us.

Monday, October 2nd

Around 6 o'clock I meet with Kaspars near Riga international airport, we quickly rearrange our luggage and go for the check in to our flight to SSG (Malabo), booked via Paris and almost 13 hours of flight to our destination. Standard luggage limitation for this flight is two bags of 23kg per passenger and a hand luggage.

Our entire luggage exceeds those limitations and weights 134 kg in total and the antenna bag is oversized. Riga Airport Security carries out detailed check for one of our bags and requests more information on the contents and their purpose. After explaining everything is good, we have to pay 75eur for extra weight and we can proceed. In each of our hand luggage, we have packed a PA, K3 and a laptop.

The flight to Paris with the transfer to Airbus A330 goes by very fast. Flight from Paris to Malabo is fully booked and there is scheduled one in-between landing in Cameroon, were most of the passengers disembark and from there to Malabo we are only 10-15 passengers on the plane.

When we arrive at our destination, an unpleasant surprise awaits us – one of our check-in luggage is missing. As a coincidence or not – it is the same bag that was checked by Airport security while checking-in, maybe they forgot to load it afterwards or it was caught up somewhere in the middle. Message from Airport employees in Malabo regarding when we could expect our things back is very unclear – tomorrow, after tomorrow or maybe even next week

Transport that we booked to take us to our hotel “Mango suites” (right) was already waiting for us outside. After arriving we have a chat with the Senior Manager from our hotel and he tells us that 3C7A (LA7GIA) has also been here and operated from the very same hotel.

Tuesday, October 3rd

Next day we took some time to look for possible antenna set-up places around the hotel and we realized that it was not very suitable. The roof was slanting and unfit for that. Next to our hotel was an embassy and other surrounding areas were populated too, with no parks or gardens nearby.

Wednesday, October 4th

In the morning, our hotel Senior Manager kindly helps us to find English-speaking taxi driver and we drive to the Ministry of Communicates and New technologies. This is a very new Ministry and nobody there really understands what we want and are looking for, so we went straight to the Director of Telecommunications department.

During our conversation, he tells us to prepare official application and detailed description of our hardware and equipment (including serial numbers), and the necessary frequencies that we want to use. We complete the application in one hour and we are back with all other necessary documents a bit later around 2pm, however, director is gone and we are told by the secretary to come back tomorrow at 10am.

Thursday, October 5th

We move to another hotel that is more suitable for our operations and currently it is the best we have seen so far. Our friend Ferming, English-speaking taxi driver, is ready to help and assist us twice a day during our whole stay. Therefore, we keep driving around the city to search for the perfect place for our operations.

In the afternoon, we set up GP antenna and walk to the city to have a dinner and to look around. Shortly we receive phone call from our hotel Manager regarding our antennas and he asks who allowed us setting them up. We arrive back to the hotel around 8pm and several cars with representatives of different security services wait for us there. We humbly explained that we did not know that the rules are so strict and to solve this misunderstanding and to show our true and sincere intentions we immediately took down all the cables and antenna.

Friday, October 6th

At 10am, we go to the Ministry to meet with the Director. This time we get some progress and information about approximate costs for the operation licenses. Firstly, I asked for a yearly license, but the price of that I better do not say aloud. Then we agreed on a monthly license, which ones price was also quite impressive. Anyway, we pay money and wait to receive the papers. Director is promising that they will be ready in the evening or next morning. This makes us a bit sad, because we realize that tomorrow is Saturday. I even make a joke that I am not leaving the office and staying overnight if it's necessary to get the licenses. At this point, we do not have any other options than just to wait. Soon the first week of our trip will be over, but we still have not obtained the licenses.

In the meantime, we search for options on how to get to Annabon. We find out that for this week all flights have been cancelled and the next possible flights could be only on Tuesday or Saturday. Again, we have no other choice than to wait and hope. We also have to consider that not only getting to Annabon could be difficult, but getting back as well.

Saturday, October 7th

In the morning, I call Director and he informs me that the Minister has signed our licenses and now they are on the way to us from Bata. The best-case scenario we will get them on Monday.

We have some time so we continue to look around for a hotel that would be more suitable for our operations. Next closest city is Luba, 50km from the Ocean. Bus service takes us right to a very beautiful hotel called "Nautico" that is located on the very shore of Ocean. After having lunch we try to find someone from the hotel Administration and we express our wishes. We look around the territory. Unfortunately, the only available free field is on the shore of Ocean, but in few hours, it will be under water by the tide. The roof is not very suitable for installing the antennas because of the sloped tin roof. Administrator of the hotel is very responsive and ready to support our activities, but we have to decline this option.

We ask for information, locals show us directions and we walk towards next hotel "Trokadero" to search for more suitable places. After an hour of walking, we realize that we did not ask how far the hotel was and we decide to turn around. We catch a taxi and the driver tells us that it is 9km away from the city and he drives us there. During the way he shows us couple more hotels, unfortunately none of them fits

our requirements, either the territory is very limited or there is no garden, park or field where to set up the antennas. In general, there is no processed land or planted gardens around houses, only a fence and a jungle or another neighbor's house.

In the evening, we call Director again and he informs us that the licenses have arrived and that all that is necessary is to put on some stamps. We agree on a meeting in his office on Monday 10am. With high hopes, we return to our hotel in Malabo and wait for Monday morning.

Monday, October 9th

In the morning we go to the Ministry for our licenses, director (right) awaits us there with a letter and our callsigns – 3C0L for Annobon and 3C1L for Malabo. Formalities take about 2 hours and the result is successful. We also made a good friend in the Ministry who is willing to help us in future who can we call in case we will run into problems. We take a couple of pictures while saying good-bye and leave

Our friend Ferming reminds us that we still have to inform the local police about our operations before we start to work. In the police HQ we visit multiple offices with our case and nobody is willing to give accept. I insist that we have to solve this today and we cannot wait for additional written approvals from the Ministry, my persistence gives results and we visit the

Secretary Cabinet, where our papers are approved and the permission to operate is granted.

Then we go back to hotel to show approved papers to the hotel owner and start setting up antennas. He is not there and through phone call, he promises to come by in couple of hours. He gets here around 8pm and during our conversation starts to ask specific questions – what benefits he will have! We realize that we won't be able to set up antennas on the roof tonight so we decide to continue this

conversation in the morning. For now, we are able only to set up our GP near hotel. 3C1L makes first QSO with ND9G on 17m.

Tuesday, October 10th

Until midday, we manage to make around 1500 QSO. We receive a call from our friend Jonny (our taxi drivers Ferming`s relative) and he tells us that it's possible to buy tickets for flights to Annobon. In twenty minutes time we take down GP antenna, pack our bags and drive to the airport, however, due to bad weather conditions the flight is delayed until next morning. Anyway, the good news is that we have our tickets on hands and we hope to get to 3C0 tomorrow.

Wednesday, October 11th

At 7am we meet with Jonny and drive to the airport. Weather conditions do not look promising and it rains without stopping. We wait in airport until 12am when finally they start to accept the luggage and give out tickets for a special flight. Before the flight, Jonny introduces us to Alida, who will be our guide in Annobon.

After one-hour flight, we are in Annobon airport and police takes away our passports. Aida brings us to the police station and explains to an officer who we are, but the passports are not returned yet and we are invited to meet with the Governor of Annobon on Monday. During the rest of the week, here is national holiday – Independence Day.
In the meantime, we keep looking for QTH. Taxi driver brings us to look at a house for a rent. Everything would be good, except there is no place for 160 30 vertical antenna. We look at another place but the same problem.

In the evening at our current house, we check the grid voltage and it fluctuates intensively so it's not very promising. Tomorrow at 6:30am we plan to attend local holiday manifestation.

Thursday, October 12th

Together with locals we participate in the Independence Day manifestation and during the parade we receive good news from the governor's office that he will meet with us on Friday. We are looking forward to this meeting because we cannot operate without his approval.

Later that day we keep looking for better QTH options, but we can`t find any better choices than the one we already have. We also keep looking to rent a generator for daytime operations, when the electricity is turned off from 6am until 6pm

This is the 10th day of our expedition since we have been in Equatorial Guinea and I think we have managed to do a lot given all the circumstances – we received licenses, we got to Annobon, we have moved into a house. Could we have done more? I don't think so because this is Africa. The good news is that we have some good friends who are helping us.

In addition, today is Kaspars birthday and our local friends greet him with celebratory lunch – grilled Annobon fish and side dishes.

Friday, October 13th

Meeting with governor is postponed to Monday, however, we get the permission to start operate.

Right away we set up 160/30 RA6LBS antenna. In spite of all cloudy and rainy weather conditions we had before, the sky today is clear without a single cloud and the sun is frying us like a hot pan, the only saver from heat is a little wind breeze and sheltering in shadow. After couple of hours, we complete vertical with radials. It's located ~100m away from our shack, because it was the closest best suitable place we could find. With this little time in sun it was enough to get sunburned, especially the skin on our legs. The next antenna we complete is Folding antenna just across the street.

On top of the electricity shortage during the day we also lose water supply and we don't have shower. At least we had some bottled water for drinking.At 4pm our local friend brings us 2.5kW generator. We test it and it can't even handle one PA on 500W, so for now during daytime we operate only with transceiver 100W. First QSO is made with DL5LYM on 14Mc CW.

In the evening we are visited by one "friend" who tells us that it is his land and asks for a payment otherwise we will have to take down our antennas. He asks 200$ for 2 weeks. Our local friends participate in this discussion but we cannot find common grounds and we leave the discussion for the next day.

During the night we manage to work first 14 MC, pile up is very good.

Saturday, October 14th

During the day we operate on 15m with 100W. Around midday, the landowner shows up again and this time he is more reasonable and asks for 100$, with some bargaining we agree on 90$ and this problem gets resolved. Now we can continue to wire cables and tune our antennas.

After midnight we switch to 80m and test SWR=3. We tune Expert antenna and it works, but something is wrong. We go check the antenna and it appears that someone has turned off power supply for command box and the antenna is operating on its default 160m. We turn it back on and tune the antenna after which it works much better. During the night we make 750 QSOs on 80m.

Sunday, October 15th

In the morning, when the electricity is turned off, we have made around 4000 QSOs in total. During the day we use generator and operate with 100W on 20 and 15m. After midday we set up GP 30/20/15 and work a little bit on 30m.

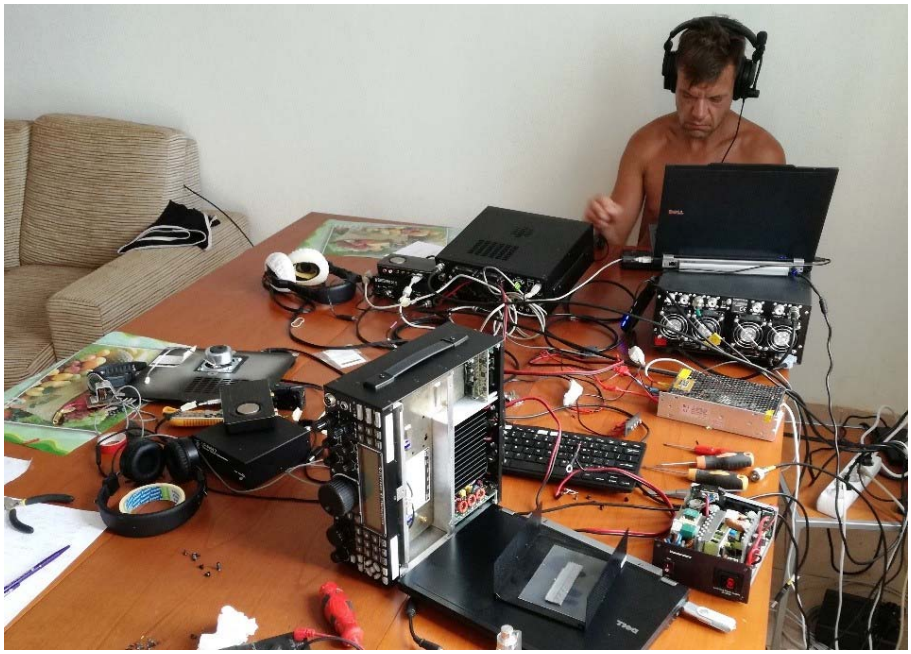
Local angler comes by and offers us to buy some fresh caught fish and we turn him down by telling to sell the fish to our local friend and helper Alida, who cooks food for us

Monday, October 16th

Day starts with bad news, because after midnight one of transceivers stops transmitting. I consult with friends and we cannot find the problem, so I call my wife home and ask her to bring my other transceiver to Girt YL2KL so he can send it to Malabo via DHL. In best case scenario it will get to Malabo on October 24th.

Police chief gives us back our passports. After that we are on the way to meet with the Governor and we are accompanied by our friends Alida and Eduard. We tell the governor about amateur radio and our expedition. We also tell him about humanitarian aid program “Hams with Hearts” that is funded by radio amateur community and our plans to visit local school to give presents to pupils and first need aids to the school. Our friends Alida and Eduard will help us to carry out this mission by buying school things in Malabo and bringing them back to Annabon, because on the island there is little options and low supply on these things. Governor also invites us to come back to island in a

year or two when the electricity supply upgrades will be completed and living conditions will be improved. In addition, there on the island is new hotel being build that should be completed in 7 months' time. Sadly, he refuses to take pictures with us because it isn't allowed for politicians there.



Back at our shack and more bad news. Unsuccessful generator start results in voltage fluctuations and leads to burned transceiver power supply. We are left only with one set of equipment. These problems will be a huge lesson for our future expeditions.

During the night we continue to work on 40m and make around 1300 QSOs. Total 8500+ QSOs are made after 3 days of operation.

Thursday, October 19th

Flights from the island are not regular and the next flight is also canceled. First it was told that the flight will be on October 21st and in that case we would have stopped to operate on October 20th. Today we were told that next closest flight could be only on October 24th. From one point of view this is good and we can operate from Annobon for 3 more days, however from other point we lose our plane tickets home that are booked on 24th of October and we will have to buy new tickets and doing it so late will cost a fortune.

Until this day we have managed to make 17000+ QSOs. Today we also started to operate on 12m and managed ~800 QSOs and a little bit on 10m. Our days have found its rhythm and routine. During the

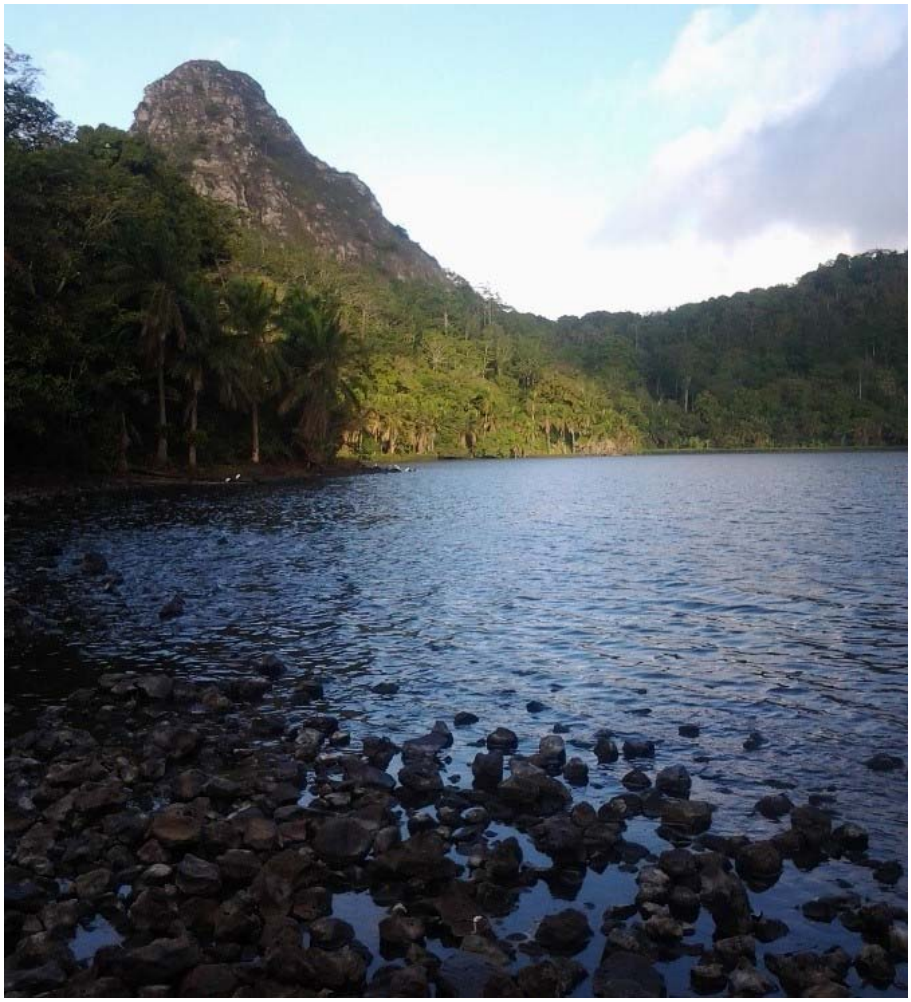
night, while electricity is available we operate with 1kW PA and from 6am till 6pm we turn on generator and operate with 100W that are maximum our generator can handle.

As usual, after midday Aida visits us with prepared delicious meals, most of the time its cooked chicken or fish with dressings and side dishes. Fish is major food supply for people living here on the island.

Tomorrow I will go and take pictures of sunrise and the local anglers going in to the ocean. I also will collect some sand for our Italian friend Castellani and his sand collection, which consists of more than 3000 sand samples from all around the world. I have brought him some samples from Iran, Bangladesh and now it will be from Annobon and Bioko as well

Sunday, October 22nd

Very early in the morning Eduard and Alida gives us a tour to see significant places on the island. One of them includes the island mountain – an old volcanic crater with freshwater lake in the middle, which is the main water supply for the island. It is surrounded by subtropical forests and for some time there has not been any rains and the water level in the lake has decreased



which is the reason of some water supply shortages we had. To get there we had to hike for an hour and it was challenging, but worth it. After that, we continued to the mountaintop and during our hike we ate some delicious natural mango fruit that were fallen from trees growing on the path side. With the sunrise we reached the mountaintop and the scene from there was amazing. We took some pictures and spent there all day. In the evening we went back and we reach the village when it was already dark. We were very tired after the hike but it was worth it.

Monday, October 23rd

After a good nights rest we await Monday with hopes to get some news about our flights, but as usual, we get the answer – maybe tomorrow, maybe after tomorrow or maybe on weekend.

I also had to see a doctor to check my ear, because I lost hearing with one ear. After some cleaning procedures, it was all ok again. There is a new hospital built on the island, but its not operational because of electricity shortage so for now they are staying in the old one until the

electricity upgrades will be completed.

During the day we had some connectivity issues with the transceiver and computer, but after some time we manage to fix the problem.

In the evening we get some good news, the water supply has finally reappeared and it is possible to take some nice hot shower.

Twenty minutes after electricity switch on there are some major problems with the grid, voltage fluctuates from 0 – 250V all night and with these kind of fluctuations we cannot use our equipment. Let me remind you that on the island the power is available only from 6pm till 6am. During that time we use our PA and work with 800W and all other time we use one noisy generator that can supply only 1 transceiver to operate with 100W.

Tuesday, October 24th

We take down 18m vertical and during the day we operate with Folding antenna hexbeam and vertical on 30/20/15m. In the evening, our friend Eduard takes back his generator. It was very old and noisy but it was our only option and thanks to Eduard who gave it to us without asking anything in return.

Wednesday, October 25th

We pay a visit to the local school within the “Hams with hearts” program and after that Eduard takes us to see Annobon`s most beautiful white sand beach called “Love beach”, which actually was quite close to us all the time but we did not manage to go for a swim

there even once.

After that, we go back to our QTH and start to take down Folding antenna when we receive a call from Eduard and he says that we have one hour till our plane back Malabo.

In a rush, we pack our equipment and antennas and while doing that we already see a plane landing on the island. Alida with friends takes us to the airport where we see people gathering and waiting to board the plane. It turns out that president of Equatorial Guinea has sent his plane to the island because the Ceiba flight company is having some problems with planes. We were very pleased to fly on a presidential airplane.

We land in Malabo airport next to some plane hangars that are approximately 2km away from main airport and it has no transport available to carry us with our 100kg baggage to the arrivals.

Our friend Jonny meets us in the airport and takes us to our hotel.

Thursday, October 26th

All day goes by with unsuccessful QTH position search and additional transceiver DHL shipment customs. State officials want significant amounts of money in custom “taxes”. Like always, no responsible persons or officials with whom we have to speak are here and we are told to come back tomorrow. Saturday is Election Day and everyone is preparing for it. This is the 2nd holiday that affects our plans.

Friday, October 27th

First thing in the morning, we go to solve our problem with the customs

and it is unsuccessful again. After that, we move to other hotel that is located 50km away from Malabo to start operate with at least one station. We found this hotel before and it was the best option for QTH. It is located near ocean coast with local electricity supply 36kW generators so electricity should not be a problem.

Until dusk, we manage to set up Folding antenna and working station. In the meantime, hotel administrator talks on phone with hotel owner to consult and finally our papers with the letter signed by the Minister are accepted and the green light is given to start operate.

Saturday, October 28th

During the night, we make around 3000 QSOs.

In the morning hotel owner comes and visits us, he is very friendly and helpful towards our project. We tell him about amateur radio and demonstrate how we operate. Afterwards, we set up vertical RA6LBS, the only problem is the little space available, but we manage to do it next to costal slope and squeeze it in between the trees. After 2nd operating day we have around 6000 QSOs. Currently we are working only with one station

and we are trying to resolve the custom problems for second transceiver.

Monday, October 30th

In the morning I go to Malabo to deal with customs issues and to get our 2nd transceiver. Nothing goes as planned, usually the customs chief is out of office and I`m being told to come back tomorrow. This continues for four days and in “taxes” I have already paid close to new transceivers full value. In the end, customs security representative tells me it’s forbidden to bring transmitting devices in to the country without special permits from the state. I guess it would have been easier just to send the transceiver back to home, however, with so much energy and money spent on this I tried one more last option, to ask Communication departments’ Director for help. He is the man who helped us get operating licenses. I visited him next morning and told about our problems and after 3 hours transceiver was in my hands and I was on my way back to hotel.

Saturday, November 4th

Next couple of days we spend in real resort, starting every day with a swim in the ocean, breakfast and dinner in restaurant, and most important - operating in the air with both stations.
Rest of the days goes by fast and the time has come to think on how to get home. Previously bought flight tickets on October 23rd are lost and we have to buy new ones – on Monday, November 13th.

Sunday, November 12th

Last QSO at 05:01 with F8BUO. During the day we pack our bags, take down antennas and we wait for taxi that was ordered to pick us up on 6pm. Two hours go by and no taxi shows up. We call the taxi company and they inform us that all taxi orders have been cancelled and they will not drive because of the elections on Sunday. We look for other options and around 10pm we find a restaurant visitor who is willing to help and take us to Malabo.

Monday, November 13th

Our flight to Madrid that was scheduled on 6am is delayed because the airport is still closed after Sunday elections. We spend one more day in hotel at Malabo and fly home on Tuesday morning.

HAMS WITH HEARTS PROGRAM

During 3C0L/3C1L expedition for “Hams with hearts” program we raised 817€ in total and spent 309€. Left over 508€ will be used for “Hams with hearts” program in our next expedition.

On Annobon we managed to visit school only on 25th of October, which was one of the last days on the island and this visit had to be accepted by the school principal. Because of irregular flights to mainland, it was not possible to buy all the things we intended, so this time we had to go only with some basic exercise books, pens, pencils and some sweets, all that was available in the local shops on the island. We visited the very little ones, 5-6 year old pupils, who had just started their school journey and were in the first class.

Overall, we did not manage to make that much impact if we compare what we did in Bangladesh and it’s mainly because of limited resources on the island and irregular flights (none) to the mainland. As one lesson learned, next time we will try to bring some first aid needs with us if possible.

You can read more about “Hams with hearts” here:

http://indexa.org/hamswithaheart.html

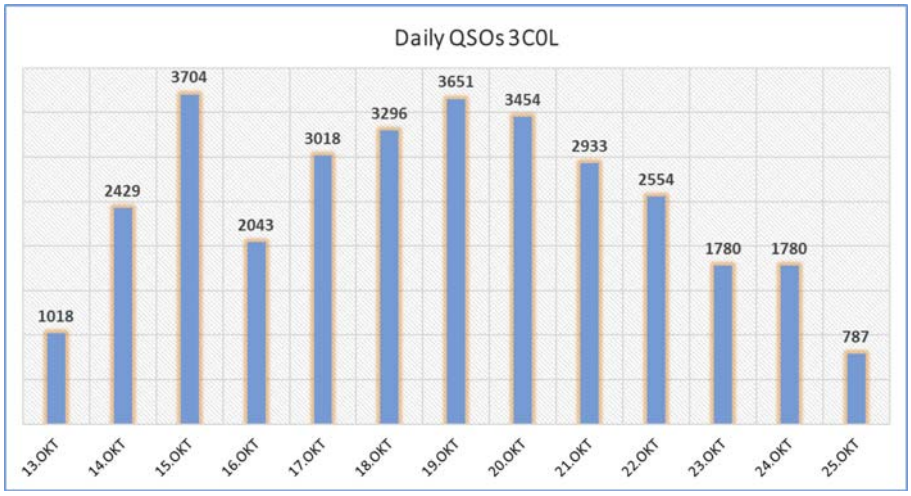
http://www.lral.lv/3c0l_3c1l/hwh.html

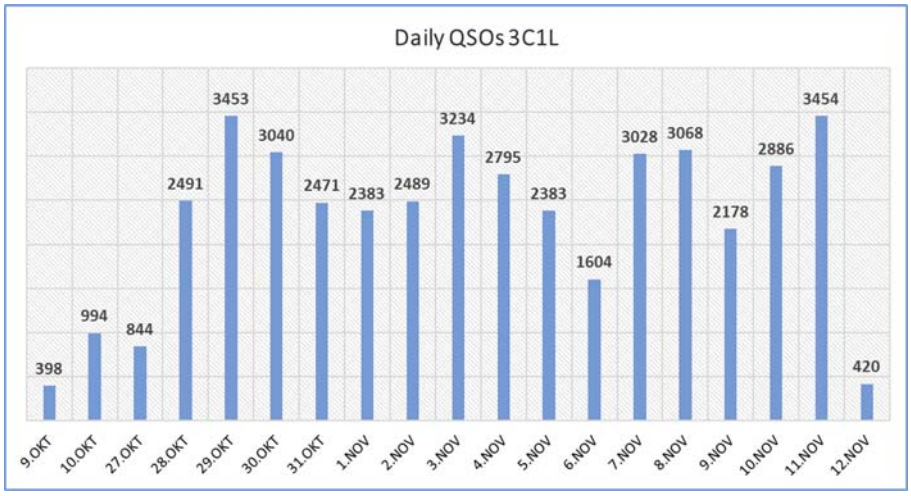
LESSONS LEARNED

We have to plan and bring our own power generator with us to Annobon. The only local 2kW generator we could find was in very poor condition and could not supply our stations with necessary power. During nighttime, when power was supplied through grid, it frequently was unstable and with fluctuations, which caused technical problems for our equipment.

In addition, again I am very satisfied with SPE Expert 1.3K-FA power amplifier performance, even with grid fluctuations from 100 – 240V it provided very stable output. This PA proved itself in our previous expeditions and it defiantly is on top of my list.

STATISTICS





DXCC by Band/Mode breakdown 3C0L

Band	PH	CW	RTTY	Total
160	0	62	0	62
80	**0**	**69**	**0**	**69**
40	0	93	0	93
30	**0**	**85**	**0**	**85**
20	80	91	0	107
17	**67**	**95**	**0**	**96**
15	81	95	0	107
12	**32**	**77**	**0**	**84**
10	22	65	0	70
Totals	**106**	**127**	**0**	**136**

DXCC by Band/Mode breakdown 3C1L

Band	PH	CW	RTTY	Total
160	0	57	0	57
80	**0**	**71**	**0**	**71**
40	0	95	13	95
30	**0**	**97**	**50**	**99**
20	103	106	42	124
17	**72**	**96**	**56**	**102**
15	82	98	51	105
12	**0**	**74**	**0**	**74**
10	0	60	0	60
Totals	**118**	**128**	**73**	**143**

Continent by Mode 3C0L

Band	PH	CW	RTTY	Total	Total %
AF	95	148	0	243	0.7%
AN	**0**	**0**	**0**	**0**	**0.0%**
AS	264	1389	0	1653	5.1%
EU	**3217**	**16449**	**0**	**19666**	**60.6%**
NA	2591	7325	0	9916	30.6%
OC	**4**	**44**	**0**	**48**	**0.1%**
SA	360	561	0	921	2.8%
Totals	**6531**	**25916**	**0**	**32447**	**100.0%**

Continent by Mode 3C1L

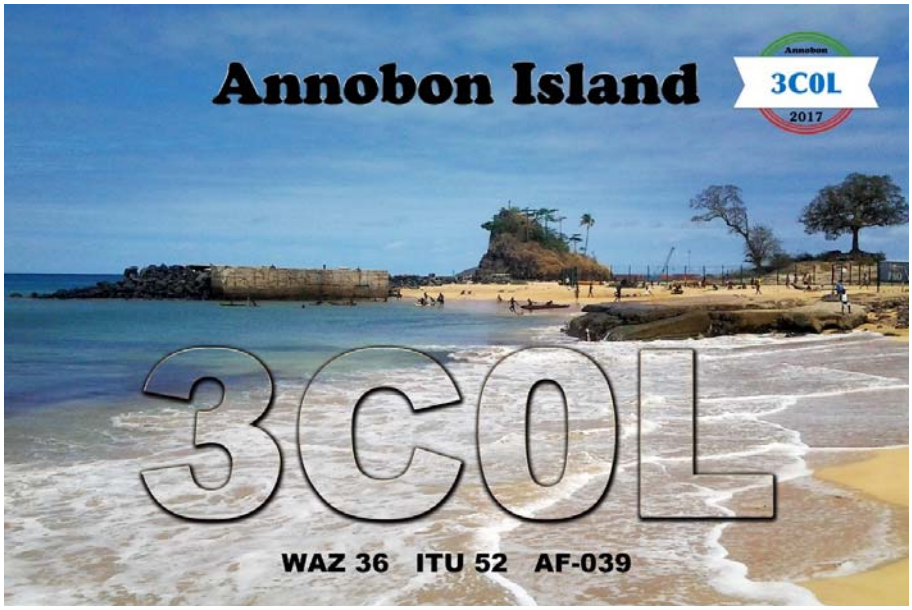
Band	PH	CW	RTTY	Total	Total %
AF	105	177	20	302	0.7%
AN	**0**	**0**	**0**	**0**	**0.0%**
AS	608	4050	269	4927	11.3%
EU	**4464**	**21383**	**1417**	**27264**	**62.5%**
NA	2307	7374	317	9998	22.9%
OC	**14**	**78**	**4**	**96**	**0.2%**
SA	280	700	46	1026	2.4%
Totals	**7778**	**33762**	**2073**	**43613**	**100%**

Continent by Band 3C0L

Band	160	80	40	30	20	17	15	12	10	Total	Total %
AF	6	11	15	12	33	54	53	37	22	243	0.7%
AN	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
AS	23	23	271	557	342	202	169	58	8	1653	5.1%
EU	**963**	**1111**	**1607**	**1750**	**2537**	**5266**	**3430**	**2190**	**812**	**19666**	**60.6%**
NA	518	710	1272	658	2499	778	1766	948	767	9916	30.6%
OC	**1**	**3**	**10**	**5**	**15**	**4**	**5**	**4**	**1**	**48**	**0.1%**
SA	10	37	106	57	193	62	169	122	165	921	2.8%
Totals	**1521**	**1895**	**3281**	**3039**	**5619**	**6366**	**5592**	**3359**	**1775**	**32447**	**100%**

Continent by Band 3C1L

Band	160	80	40	30	20	17	15	12	10	Total	Total %
AF	3	9	18	41	97	51	59	17	7	302	0.7%
AN	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
AS	105	334	860	1349	1469	277	480	42	11	4927	11.3%
EU	**925**	**1437**	**2680**	**3309**	**5196**	**5141**	**5871**	**2088**	**617**	**27264**	**62.5%**
NA	329	627	1312	1181	3553	1656	1133	206	1	9998	22.9%
OC	**1**	**1**	**8**	**17**	**23**	**18**	**17**	**4**	**7**	**96**	**0.2%**
SA	3	37	130	137	319	122	192	52	34	1026	2.4%
Totals	**1366**	**2445**	**5008**	**6034**	**10657**	**7265**	**7752**	**2409**	**677**	**43613**	**100%**



CONCLUSION

Instead of 4 weeks expedition it turned out for 6 weeks. I find this expedition to be successful and I am satisfied with the results given the conditions we had. In total we made around 76000 QSOs. We gained great experience and we learned new things for future expeditions. With this article I conclude 3C0L/3C1L expedition and I thank all our expedition supporters. I also would like to thank our friends who supported our team: Eduard, Alida and our home support team.

In addition, I have some good news for those who did not manage to work us this time! We are planning to conduct one more expedition to Equatorial Guinea already this month, February 2018. More

information coming soon on new expedition website and as usual in email. I wanted to give you as much as possible information and details in this article, and that is the main reason why we could not publish this sooner. Please be understanding about this.

For more pictures and video clips, please see expedition movie:

https://www.youtube.com/watch?v=aLN2O8zsXUg

Thank you for reading and see you on bands soon!

73, Yuris /YL2GM/

Full supporter list available on expedition website:
http://www.lral.lv/3c0l_3c1l/supporters.html

3CØL and 3C1L

2017 DXCC Year-End Review

Joe Reisert, W1JR

January 9, 2018

Reprinted with permission

2017 Overview

DX propagation took a sharp decline in 2017 especially on the upper HF bands as we approach Solar Minimum. There were approximately 100 days with NO sunspots. In March ARRL deleted KH4 and KH7K but reinstated them several weeks later so we are still at 339 active entities. There was no known activity from any of the 10 most wanted entities on the Club Log DXCC Most Wanted List and only intermittent or short single operator activity from another 4 entities in the top 20. There were approximately 285 entities activated in 2017, about the same as in 2016 with over 275 on CW. As usual, there were many DXpeditions although not in the 20 most wanted entities. Probably the biggest news this year was the introduction of the FT8 weak signal digital mode introduced in July. More on that later.

2017 in Review

The DXCC Challenge and the CQ Magazine DX Marathon activity were high as usual. The introduction of the ARRL 2018 Grid Square Challenge will surely affect some DX activity next year. DX contesting is ever increasing and new regional contests are always popping up.

We are now using the “DXCC Most Wanted Survey” by Club Log (WWW.ClubLog.org) since it is very up to date. Michael, G7VJR at Club Log monthly updates this list based on users log entries. The end of December 2017 most wanted list is very similar to December 2016. The latest 10 most needed DXCC entities in order of rarity are: P5, 3Y/B, FT5W, KH1, BS7H, CEØX, BV9P, KH3, VKØM, and KH7K. 2017 saw no notable DXpeditions from the top 10 Most Wanted Survey. However, many semi-rare entities were activated during the year as will be seen later. Club Log now has almost 465M QSO records with 48K active and 67K total users to back up these data.

YL2GM, Yuris, and YL3AIW, Kaspars, surprised everyone with the 3C1L and 3CØL DXpedition in October 2017

To say the least the cost and logistics to activate the rarest entities is getting prohibitive and in some cases, can run over $500,000. Unfortunately, as frequently happens, several DXpeditions such as 3Y (Bouvet) and KH1 were delayed. Some DXpeditions were shortened or had to be rescheduled. For those who criticize DXpeditions, here are just a few of the problems they experienced in 2017 to give us a new entity:

Hurricanes in the northern portion of the Caribbean curtailed many DXpeditions. Puerto Rico had great damage as well as to the Arecibo radio telescope dish, Marshall Law declared (DU1UD/8), security concerns and license cancellation (9L1T), terrible high (35C) temperatures and humidity (85%) at TL8TT, VK9AR and VK9MAV, dangerous aggressive polar bears and walruses at RI1F, numerous medical emergencies on location or preventing a trip (KG4LA and many others), delays due to lack of return transportation (3CØL), license expired (RI1FJ), transportation delays (RI0Z, V63J and others), no license available (3C1/3CØ and 8R1 for KCØW), visa problems (D2TI rescheduled), volcano eruptions (H4ØGC), boat nearly capsized (5L3BI and operation cancelled), antennas damaged (VR2/KCØW), to mention some. We DXers shouldn't complain!

Most of the larger DXpeditions (3 or more operators) activated in 2017 were available on SSB, CW and Digital modes. CW was as active as ever since there were over 275 entities active on CW. The new FT8 digital mode introduced in July is a Game Changer. It is a big advancement in the State of the Art of weak signal detection making digital contacts in 2 minutes possible versus the slower JT65 mode. Now many small stations can make contacts when the bands seem closed!

YOTA (Youngsters On The Air) as well as JOTA (Jamboree On The Air) activity is increasing especially in Europe and by IARU and ARRL assistance. They often use special recognizable call signs. Give them a call. Youngsters also have launched high altitude balloons (ARHAB). We need to encourage these youngsters as we DXers age. As we will see later the DXer Silent Keys increased at an alarming rate in 2017.

Also, don't forget CTU (Contest University) under the direction of Tim, K3LR. It is now in its 12th year having had over 7,000 students in 8 DXCC entities. There is also CWA (CW Academy) by CWops, a program to improve CW skills.

A Solar Review

Solar Cycle 24 is definitely on the wane. Solar flux, the major generator of upper HF DX propagation, was mostly below 100 all year except for two short times (early April and early September) when the solar flux rose above 100. The September region 2673 storm was the worst solar storm in the entire SC 24 so far. It is normal for a few flares during the final stages in a SC as activity decreases. SC 24 should bottom out between 2019-2020.

Solar Flux is a good indicator of improved propagation on 10 through 15 meters, especially when the K Index is low (1-2). There were about 100 days with no sun spots usually for several days at a time. Experts are still telling us that this was the weakest SC in over 100 years and that SC 25 may be the weakest in 200 years. Let's hope they are wrong!

Band by Band Activity

160 Meters: Activity seems to be increasing as propagation on the upper HF bands is decreasing. Some Europeans received additional spectrum on the band. DXpeditions usually operating between 1810 and 1830 KHz. Digital modes, especially FT8 are usually around 1840. W8LRL is still the Top Band leader with 342 confirmed entities (including about 11 deletes). Try to avoid frequencies divisible by 5 (i.e. 1820, 1825, 1830 etc.) since broadcast birdies are often there.

75/80 Meters: Activity is slowly increasing especially on CW when DXpeditions are active. The later often operate at either the low end of the band or near 3525 KHz. 75 Meter SSB DX is often concentrated between 3790 and 3800.

60 Meters: Several new entities have received permission to operate in this band although many are limited to 15 Watts EIRP and a narrow band centered around 5357. As a result, there is lot of FT8 activity there. Some split frequency CW operation to 5405 is sometimes available. The FCC is considering modifying the USA 5 channel operation to allow non-channelized operation in a small portion of the band to be more compatible with the rest of the world allocations. There have been over 150 DXCC entities active on 60 Meters but the ARRL DXCC program still does not recognize 60 Meters contacts.

40 Meters: It’s still the go to band during the dark hours and especially during winter time. DXpeditions are often there on the lower end or at 7025 for CW and 7100 and up for SSB.

Remember that USA stations cannot operate SSB below 7.125 MHz but best to stay above 7.128 for safety.

Most of the world can now operate from 7000-7200.

30 Meters and up: 30 Meters is becoming more popular especially with DXpeditions and low power stations.

Remember that USA stations are limited to 200 Watts output power.

The new FT8 as well as other digital modes from 10.135-10.150 MHz were very popular by DXpeditions as well as for QRP and digital modes and is sometimes open 24 hours a day during the darker months. 20 Meters is still the daytime breadwinner along with 17 Meters where activity is increasing and there is less congestion. Signal strength on 17 Meters is often better than 20 Meters when both bands are open. 15 Meter openings are decreasing with the lower solar activity. During this past year 12 and 10 Meters are showing fewer and shorter openings as solar flux decreases. Sporadic E propagation in the northern hemisphere especially from mid-May through early August and in December often enhances HF and 6 Meters DX but this is not due to sunspots.

Other 2017 News

Ever since mid-July the new FT8 digital mode by K9FN and K1JT has taken the bands by storm. This mode is especially popular with operators with limited power and small antenna systems. The most notable activity is on 6-Meters where the propagation can be erratic. On 6 meters FT8 and similar weak signal digital modes usually operate above 50.250 MHz and often cause the lower portion of the band to be quiet even when DX propagation is prevalent!

Pirates and Unauthorized Operations

This seems to be a perpetual problem. Nowadays many DXpeditions are reluctant to give out their call signs before commencing operation for fear that their call sign will be pirated. Frequent pirate call signs during this year were ZB2A, JX7DFA, JX7F, 5H3PM, 5H3MG, P5/3Z9DX, YK1AO (Omar is now living in the USA), and VKØ/KEØHWZ to name a few. WFWL (work first, worry later) still applies but if you know it's a pirate, don't waste your time or $$ to support that activity. K9EL often lists pirate calls on the CQ Magazine Marathon page (click here).

Furthermore, don't spot rare DX on the cluster unless you know it's legit and surely don't spot rare DX call signs for test purposes. It causes lots of bells to ring and unnecessary worry. Finally, don't post rare calls to thank someone for a QSL etc. **No one is listening, cares or appreciates this type of boasting.**

IOTA

The “Islands On The Air” program is arguably the most active DX program after the DXCC. Let’s face it, many of the islands are DX and over 100 DXCC entities are already separate IOTAs.

Chasing IOTAs can fill in the gap when an operator has worked all the active DXCC entities and wants to remain active on the bands.

During the past year the IOTA program has separated from the RSGB and a new website WWW.IOTA-World.org has been activated. It is filled with info on the program and the over 1,200 IOTAs that are available. So far only about 1,125 or so have been activated. IOTA DXpeditions happened all year from the easy to the more difficult and rarer IOTAs such as A7ØX (AS088), R71RRC (AS071), AT7M (AS096), R1F (EU190-New activation), S21ZAS (AS127), S21ZDC (AS140), R7ØASIA (AS020), VK9AR (OC216) and VK9MAV (OC267) to name a few. Furthermore, QSLing can now be conducted for some IOTA operations using Club Log.

DX Contesting

DX contests are everywhere using CW, SSB and Digital modes. The most popular DX contests seem to be the CQ Magazine SSB and CW as well as the ARRL CW and SSB. However, there are many other DX contests sponsored by organizations around the world.

As mentioned above, DXers should help out the youth to get involved in contesting, especially DX. Younger operators are showing interest especially since most contests require computer logging.

Contest rates are slowly climbing with new software and more spotting websites despite poorer propagation. Logs are often required on line usually within a few days after the contest. Contests sometimes yield new band countries and modes sometimes even before the contest as stations test out their equipment. The WA7BNM Contest Calendar is a great source of contest activity.

Equipment and Technology

New gear and programs are still showing up all the time. One of the best places to see what's new is at the Dayton HamVention now held in Xenia, Ohio in mid-May. Elecraft announced a new 1,500 Watt solid state amplifier, ICOM and others have new transceivers, MFJ has picked up the InnovAntennas line and DXEngineering now has the Opti-Beam line. SteppIR has a new moderate sized Urban 2 element Yagi, Spider beams are coming out in several forms, SDR transceivers are becoming very popular from FLEX Systems and others. LDMOS power FETs are improving. Soon tube amplifiers will be replaced by them. Sad to say the ICM (International Crystal Mfg.) and Radio Shack have either gone out of business or are bankrupt. Keep an eye on the major Amateur magazines for new equipment offerings. Finally, be sure to keep safe practices especially on tower and antenna work. The FCC and OSHA have recently announced a new free publication entitled "Communications Tower Best Practice Guide.," They remind us that every tower climber death is preventable.

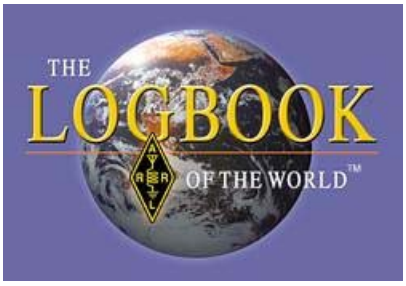
Ham Radio and the Internet

There is no doubt that the Internet is increasingly playing an important part in Amateur Radio be it DX Clusters, working groups, sending in contest logs, QSL info, LOTW (Log Book of the World), helpful hints etc. Club Log is becoming the go to place to see if you are in a log especially with DXpeditions. Some DXpeditions update their logs daily while others actually update logs continually. **Try to prevent duplicate QSOs on the same band and mode.** Each dupe may prevent someone else from making an ATNO (All Time New One) or even a band slot or mode.

Don't forget to correctly spot call signs and frequencies on DX clusters. **Due to the addition of the FT8 mode, it is now important that digital signals be listed by their mode in the remarks column on the clusters (i.e. FT8, BPSK, RTTY etc.).** Of course, self-spotting is frowned upon. Just because a DX station is spotted doesn't always mean the call sign etc. are correct or that the station is really there! Working an incorrect call may result in a NIL (Not in Log) to your QSL request.

Obviously posting obscenities and negative comments on the DX

Clusters is never acceptable.



QSLing and DXpedition Costs

It goes without saying that postage rates are going out of sight. LOTW (Log Book of the World) is very popular with DXers, especially those that don't want or need to collect QSL cards. Club Log and their OQRS (Online QSL Request Service) are also popular for those who prefer a paper QSL card. It is a method to obtain a QSL without having to send one (an added expense) and to guarantee that your request makes it to the proper source without theft. What could be better in this day of high and varying postal charges at home and abroad? I prefer paper QSLs since they may be needed for awards other than DXCC but I realize that I am now in the minority.
Most Amateur Radio societies have their own QSL bureau but often you have to be a member to use their service. The ARRL outgoing QSL Bureau or the QSL bureaus in many entities can lower QSLing cost, LOTW is extremely popular and the DXCC has been the prime user but other awards such as WAS, VUCC, Triple Play, and some CQ awards are now available. There are almost 900 million LOTW QSO records, an increase of over 10% since 2016. There are almost 100,000 registered LOTW users and this trend continues to increase and doesn't look like it will level off for many years. Furthermore, contesters are often uploading their logs immediately after the contest ends. Many DXpeditions are now using LOTW, sometimes while still on location!

DXpeditions to rare entities are getting more expensive and many cost $100,000 or more. They are experiencing difficulties obtaining transportation and raising the necessary funds etc. It now can cost well over $20,000 per operator to participate and travel to rare DX entities. Propagation is also limiting the number of contacts especially on the higher bands. Most large DXpeditions are 50% funded by the

operators and the rest from clubs, individuals and QSL donations. Please support DXpeditions directly or through organizations such as NCDXF, INDXA, CDXC and EUDXF Foundations etc. The NCDXF contributed over $200,000 to DXpeditions in 2017 alone!

Operating techniques

A look at 2017 statistics on Club Log logs shows that the rarest DXpeditions had more CW than SSB contacts. Of course, the “599 TU” QSOs on CW or “59 thank you” on SSB are still ever present especially with DXpeditions. Operating CW at high speed (30 WPM or higher) has caused problems perhaps due to computer receiving and processing and were very much in evidence although QRM can add to the problem. Serious DXers are definitely using the DX Clusters and Reverse Beacon Network for spotting DX.

DQRM (Deliberate QRM) is still a major problem. Calling out of turn or calling continuously only slows down the pileup so less calls get into the log. Tuning up for long periods of time is also a problem. There is always plenty of spectrum to tune up away from the DX operations. This subject has been beaten to death but we must do our best to speed up operations.
Again, make sure to review the DX Code of Conduct (www.dx-code.org) W3UR will soon publish some good tips on operating for DXpeditions in his “How’s DX” column. On CW some DX stations transmit at 30 to even 40 WPM or seldom sign their call signs or where they are listening. Some operators just can’t copy their call sign that fast. Some of the problems may be the limitations of code readers especially for newer operators. **The old adage still applies: Listen, Listen, Listen before you start calling.**

Try not to rag chew or tie up frequencies frequented by rare DX such as 3.795, 14.025 and 14.195 MHz as well as 14.040 and 14.260 MHz for IOTA. Other suggested frequencies to avoid are listed in “The Daily DX.” Transmitting on these frequencies will make it difficult for others who are experiencing better propagation than you are.

Silent Keys (SK)

This seems to have been a bad year for Amateur Radio as many well-

known DXers and important Amateur Radio people became SKs. The SK column in QST has been listing over 200 per month. Other Radio Societies also have a rise.

The following is a partial list of notable DXers, contesters, designers or officials in Amateur Radio who became SKs in 2017. They include in no particular order: K4DLI, WA5IYX, HB9MX, K4VX, ON6WU, VK6LK, K1VW, RU3AX, DJ9KR, G3IOR, I3BLF, W7TSQ, W7EJ, 4S7NE, I2QMP, 9M6XRO (G3OOK), W3GH, 5T5JL, N4ZC, NP4B, 9M2FK, F5SE, and N4AA, editor of The DX Magazine.

2017 DXCC and ARRL Matters

The ARRL had DXers all in a tizzy when they moved KH4 and KH7K to the deleted list last March. Fortunately, they re-instated same several weeks later. Therefore, the total number of active entities remains at 339. The CQ Magazine WAZ (Worked All Zones) award is now able to access LOTW. The 2018 ARRL Handbook, a great reference book, is now available. It was extensively rewritten and now weighs about 6 pounds and over 1200 pages! QST page size has been slightly reduced as is the number of pages (about 10%).

Latest license figures in the USA shows a slower but gradual rate of growth of about 1%. The 2016 “DXCC Yearbook” was available on the internet after all later in 2017. Perhaps there will be a 2017 version later in the year. However, all this Yearbook contains is a listing of all the DXCC confirmations that took place during the year. For up to date info, the ARRL website lists are always updated continuously throughout the year.

Sample 2017 DX Activity Month by Month

January: DX activity was moderate with about 220 entities available

but it was much more difficult to contact rare ones as propagation deteriorated especially on the longer paths. My own total for 2017 was down from a usual 200 to 175 entities in the month. Some notable rare to semi-rare stations active included: SØ1WS (active all year on all bands and modes), VK8RR/9 (CK), H4ØDA, SV2ASP/A, XW4ZW, E51AMF (N/C), ZC4s, XT, 5U, TZ, TU, A3, S2 and UA4WHX from several W. African entities.

February: TL8TT (63K QSOs), 3X, 9Q, A5, 7P8, 9X, 5T, VP6EU (39KQ), TX5T (FO/A), J5 and J2.

March: H4ØFN, 5V, 9G5X (29K), 5U7R (75K), 9N7EI (30K), TU7C (52K) T2 (10K), S21s (51K), T3ØTM, VQ9, WW6RG/KH9, and VK9VKL (new resident on Xmas).

April: 4W, 3D2/R, FJ, J5B (19.5K), 5A5A, A25UK (44K) and 5V7P (16K).

May: VK9L, FO/A, VU7s, OJØW, TJ, E44WE, E31A (36K), T2R and TN5E.

June, July and August: To describe the summer conditions in the Northern Hemisphere as poor would be an understatement. DX during this period did include VK9AA (Xmas). FH/DJ9RR, Z81D, FJ, FP and 9XØTA.

September: OJ0, KH9/K7ASU, E6AG, A25s, R1F (FJL-11K), YJ, HC8, 4W6RR, A5A, 7Q7WW, and S9YY.

October: S9s, 5X, 3CØL (32K), FT5XT, VU7L, 3X, T2AR, ELs, VK9CZ (CK) and E44WE.

November: 3C1L (42K), VK9N, 4W, H4ØGC (36K), 9U4M (55K), J5T and 5X.

December: Really faced poor conditions. Activity included 9L/KW4XJ (digital), HC8LUT and OJ9X, Santa himself (over 60K).

KCØW, Tom, operated from several locations in Asia and Africa. Here he is shown in Zimbabwe.

And now the Drum Roll

There were approximately Fifty-four (54) entities that are NOT believed to have been active during 2017 as follows: *

Africa (11): 3B6, 3Y/B, D6, FT/G, FT/J, FT/T, FT/W, FT/Z, T5, VK0H, and ZD9.

Antarctica (1): 3Y0 (Peter 1)

Asia (8): 1S, 7O, BS7H, BV9P, EZ, P5, XZ, and YK.

Europe (2): 1A0 and JX

North America (8): 4U1UN, CY9, FO/C, KP1, KP5, TI9, XF4 and YVØ.

Oceania (18): 3D2/C, FK/C, FW, KH1, KH3, KH4, KH5, KH7K, KH8/S, T31, T33, VK0/M, VK9/W, VP6/D, ZK3, ZL7, ZL8 and ZL9.

South America (6): CEØ/X, HK0/M, PYØ/S, PYØ/T, VP8 S. Ga, and VP8 S. Sand.

**Please note that some rare entities may not be on this list for 2017 because some operations were short, set up schedules or only on*

VHF etc.

The DXCC entities that are not believed to have been activated in ten (10) or more years has increased and now includes: 3Y/P, BV9P, BS7H, CEØX, EZ, KH1, KH3, KH7K and YVØ. Two of them are promised in 2018. This means that an avid beginning DXer working hard at DXCC will take at least 10 years to make it to the DXCC Honor Roll. This list also serves as a guide to those planning DXpeditions to rare entities. As for me, the top of my need list for the DX Challenge has not changed in many years and not surprisingly goes to P5, BS7H and FT5/W in that order.

Upcoming DXpeditions

There are only a few announced DXpeditions for 2018 on the DX Most Wanted List.

3YØZ is scheduled from Bouvet Island in January/February and KH1/KH7Z activity is promised for June.

Other rare entities promised for 2018 include 9MØW in March, 3B7A in April, and VP6/D in Oct. The often delayed YVØ, Aves Island DXpedition could still happen. Stay tuned and check the Daily DX calendars at: http://www.dailydx.com/the-daily-dx-calendar for future operations.

Looking ahead to 2018 and Beyond

SC 24 is definitely on its last legs. Solar activity will continue to decline until 2019/2020 when we hit rock bottom. From the predictions, we've been hearing SC 25 will be even weaker. Believe it or not, the first sunspot for SC 25 occurred back on December 18, 2016! The new FT8 weak signal digital mode should help when conditions are poor.

DX means different things to each DXer. Some DXers chase the DXCC Honor Roll, the DXCC Challenge or the DX Marathon. I'd estimate from the latest DXCC mixed listings on the ARRL DX Standing that there are well over 2,000 persons worldwide that have confirmed all 339 DX entities. Fernando, EA8AK now has 3256 entities to lead the DXCC Challenge. More than 150 DXers have now

achieved the very difficult DXCC Challenge 3000 level. The top 6 meter station, LZ2CC now has 267 entities. W7GJ became the first North American station to break the 6 meter 200 entities level with 202 entities while only about 25 are above the 150 level. EME is now a very important factor for leading North American 6 meter DXers.

It's time to improve your 20 and 17 meter as well as your 80 and 160 meter antennas. WRTC 2018 in July will be sponsored by the DL Bavarian Contest Club. Then there are the never-ending DX Contests, DX Marathon, DXCC Challenge and IOTA chasing. There are lots of things to do. Don't let the airways die for lack of activity. HF radio conditions on the mid-bands are still fair but improving on the lower bands. Stay active and join the fun. Also, don't forget to support the various DX Foundations around the world that help make DXpeditions possible!

Finally

We hope this review has been informative. Using DX publications and the Internet are a great way to keeping us up to date on what is happening now and in the future.

Once again, I am honored to be asked by Bernie, W3UR to write this review for the 13th year and for his valuable inputs and critique. Thanks also to John, K9EL and Frank, W3LPL for their valuable inputs as well as my son Jim, AD1C for all his computer help! Previous Reviews can be read on the K8CX Ham Gallery website (click here).

NOTE: Obviously all the opinions etc. expressed are solely mine as are any errors that I have made. This End of Year Review is copyrighted. Therefore, copies or use of this review MUST first be approved by Bernie, W3UR and then a courtesy copy of the reprint sent to Joe, W1JR.

Best of DX to you in 2018. I'll see you in the pile ups.
73, Joe Reisert, W1JR

Reprinted with permission

For a free two-week trail of the Daily DX and Weekly DX, visit:
http://www.dailydx.com/free-trial-request/

Feature Articles

Another Pecker Tale and the SteppIR

Tom Vinson
NYØV

I was sitting at my station playing around with FT8 on 17m. When I pushed the band button on my SteppIR SDA100 controller I got a CABLE OPEN error message on its display. Rut Roh. Switching the band back, it went to the controller's normal Manual Mode. Rut Roh, an intermittent connection! I hate intermittent connections. You are just hoping it goes away or fails completely. But, we all know that they don't just go away. Something is wrong and now you can't seem to make it fail so you can fix it. Ever been there?

I began the trouble shooting by turning the antenna and exercising the controller by re-calibrating on each band. Finally, I got the dreaded, but welcomed CABLE OPEN to stay on. With the failure now showing itself, I got down to bugging out the cable at the connector in the shack. All the motor pairs in the SteppIR should measure 20 ohms. You can also check for shorts between wires on the DB25 connector. Sure enough, I had some wires that looked to be shorted. It just so

happened they were all on Director #1. And fortunately for me, the temperatures for February in Minnesota were in the upper 30's and low 40's. With the 3Y DXpedition moving along (at that time) I was highly motivated to figure out and fix the issue!

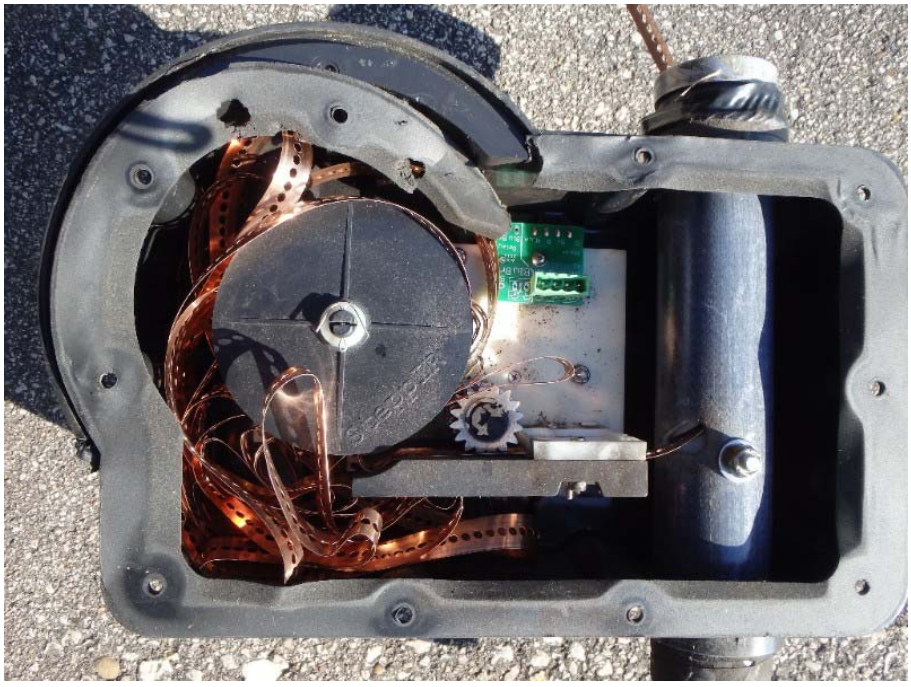
I have a LM470 70' Tri-Ex tower that is motorized in both telescoping and tilting over. So bringing the antenna down only takes about 30minutes. I started walking along the cable working my way from the antenna back down the rotor loop. I had previously had this same issue and sheathed the cables with sump pump plastic hose/tubing. It didn't work. I found woodpecker holes at various spots along the cable bundle. This meant I had to open up the sheathing and inspect the cable. Low and behold I found some spots where the #*$%*# woodpecker had hit the control line. I found orange, brown, and yellow ones that were hit with some wiring exposed. Bingo! I verified that those three color pairs were to Director#1 and thought I was golden. I repaired the breech and with the antenna down I went inside to check the controller. Viola! No CABLE OPEN. That done, I raised the antenna and pulled the Inverted Vee's back up. It was NOT the end of the story. Remember, it was intermittent!

Once I got back into the shack I decided to recalibrate on 17meters. The controller blinked and then came up with the dreaded DRIVER CHIP ERROR. SteppIR in their design decided they needed a few volts on the stepper motors in order to keep them from drifting. Whenever there is a short somewhere, it takes out one of the driver chips. The voltage is always ON, even if the controller is OFF. (We would *not* do this at Collins) The only way to be sure there is no voltage at the antenna motor is to unplug the controller. But, I digress. I immediately boxed up the controller and shipped it to SteppIR for repair and since the 3Y expedition was getting closer, I doubled down and purchased a new one for a spare! In the meantime I checked the cable and sure enough, it was bad. Darn intermittent! Soooo, I pulled the antenna down a second time. This time around, I got the idea to put a continuity checker/ "bugger" on the terminal strip at the base of the tower. By wiggling the cable back and forth I just listened for a beep from the bugger. I was about two feet from the boom when I got the first beep. Walking down the cable I bent it back and forth until I could make the buzzer sound off each time I bent the cable. Digging in I found a small hole by some electrical tape. Upon opening it up…you guessed it. While the hole in the cable was small, it was hit hard enough to expose the yellow and brown wires. Upon repair of that short, I bent and swayed the cable all the way to ensure that nothing

else was shorted! Inside the cable now looked great. There were 20ohms showing on each motor winding and no shorts between the cable wires. Feeling good about the cable, I raised the antenna back up.

In a few days my new controller arrived and I was able to hook it up and tune it. I ran a recalibrate and checked the SWR. Hmmmm, the SWR was running high, like 2 to 2.5 to 1 on each band except 40 and 30m. Based on what I have read on the SteppIR reflector, this probably meant an element was not working right. Since the SWR was good on 40 and 30m (they use the Driven element and Director #2), that was telling me that more than likely, it was either the Reflector and Director#1. Director#1 was of course, my first suspect since that is the element that had the wires blasted by the woodpecker. I homed all of the elements and went outside.

I pulled the antenna down for the third time. (I was becoming very glad I decided to put in the motorized/tilt system!) I tapped on the element tubes and sure enough, I could hear rattling on one side of the Director #1. After removing the tape on the rubber boots, I pulled out the element tubes from the EHU. On the right side I had about 10 feet of copper tape in the tube with the tape disconnected from the EHU. On the left side there was about two feet of copper showing, but still connected to the EHU. When I opened up the EHU, what I found was this:



Copper tape spaghetti inside Director #1 EHU

After another letter written to SteppIR, I shipped the EHU back to SteppIR for a refurbishment job. It just so happens that I had a spare RF connector EHU. I decided I could use this driven element EHU as a new Director#1 at least until I get the repaired unit back and the weather is warmer. The only difference between the EHU's is that the RF EHU has a balun in it. With the new EHU installed, I raised the tower once again. And it's working! Unfortunately about this time the guys anchored at 3Y had their ill-fated engine issue and were headed home.

As a final note, SteppIR repaired the blown driver at no charge. Their customer support was very much appreciated in getting that controller repaired and back in good working order. Any ideas on what sheathing might work better to keep the woodpeckers from piercing the cable would be appreciated. Cold water pipe foam tubing perhaps?

In response to the woodpecker article:

Letter to the Editor

Tom - Your story brought tears to my eyes (from laughter). But seriously, I think you may now be in a position to research the answer to an age-old question.

How much wood would a woodpecker peck; If a woodpecker would peck wood?

On the other hand you may reach a dead end on this research if you are really dealing with "cablepeckers" and not woodpeckers.

Yours Truly,
Rod, ex-T32DAS

Photo: WØGXA

Six Meter Moon Bounce Update

by Rod Blocksome, KØDAS

You may recall a group of EIDXA members went “off the deep end” a couple years ago and built a portable 6-meter EME station by pooling our resources. Those involved are Karen, KØEGQ; Jason, NRØX; Wyatt, ACØRA; Gregg, KCØSKM; Joe, K8OM; Steve, NUØP; Bill, NØLNO; and myself. We have enjoyed much success with our efforts focused on working the DX-peditions such as Lance’s (W7GJ) operations from Palau, Ulithi, Cocos/Keeling, and Christmas Islands.

Our station consists of a high performance 9-element M2 yagi on a 48-foot boom, ½-in. hardline, DEMI LNA, 1.5kW PA, ICOM 9100 rig, and a laptop running JT-65A. AC power is supplied by portable generators – one for the rig and a second one for heat in the winter. This is not what you would call a “big gun” station, however we seem to perform better than the average single yagi station. The secret of our success are these factors:

1. Since we are “portable” we can select our location for low line noise and broad flat terrain in front of the antenna.
2. Short, heavy gauge AC power cables to minimize line drop
3. Short, low-loss RF transmission line

But to achieve these advantages, we have to give up operator comforts and seem to frequently track down and solve grounding, bonding, and shielding issues.

So last fall we moved the station into Jason’s RV for a bit more

operator comfort and had the antenna system tweaked to perfection (reflected power was nil with 1300 Watts forward). Then winter came and we didn't use the station until about January when we went out to get things ship-shape for working the 3YØZ dx-pedition on 6 meters.

We found that one guy rope had somehow slipped off the anchor and the tower flopped over to the North with the beam landing broadside. The anchor was frozen into the ground. We suspect a deer – but who knows. Being short on time, we removed the damaged antenna and installed another identical yagi that was slated for the 4-yagi array on an AZ-EL mount. This and other work was all done at freezing wind conditions. Any complaint as we worked was quickly put aside by a reminder of what the guys at Bouvet would encounter.

Jon Jones, NØJK, who authors "The World Above 50 MHz" Column in QST, was slated to come up and operate with us when the Bouvet dx-pedition was called off. So when spring weather returns, we are considering taking the station on the road to perhaps Nebraska which many European stations need to complete their 6 meter WAS.

Jurassic Journal

- A look back in time -

Tom Vavra WB8ZRL

Twenty years ago, the Spring of 1998

The Spring of 1998 saw three new entities (I keep wanting to say Countries): FO/AUSTRAL ISLANDS, FO/MARQUESAS ISLANDS

and H40/TEMOTU. Each became effective April 1st, and were soon activated. Their activation was not the zoo that Z6ØA was.

FO Bob Ferrero, W6RJ and his son Bob Jr, W6KR were active on all bands as FOØFI and FOØFR from Rurutu in the Austral islands for one week in mid April and then moved to Nuku Hiva in the Marquesas Islands for another week.

H4Ø H4ØAA activated Temotu at exactly 00Z on 1 April. They operated for 13 days with OH2BE, OH2BH, OH2TA and JA5DQH during the first week, replaced by 9V1YC, N4GN and W6OSP for the second week. The core group of OH1RY, OHØXX and N7NG were there the full 13 days. A total of 67,129 QSOs were logged.

FT5X Rene, FR5HR was active as FT5X/FR5HR from Kerguelen Is for several weeks.

JX Per, LA7DFA was active signing JX7DFA from Jan Mayen on 160 and 80 meters with high power and a 1/4 wave antenna. We miss the days when JX was an active entity.

8Q There were two operations from Maldives in May. Lorenzo, IK5MDF signed 8Q7DF and Jim, GØWBO was active as 8Q7JJ.

3B7 The 3B7RF DXpedition to Raphael Island in the St. Brandon Archipelago was on the air 6-17 May. The operators (3B8CF, HB9ABO, HB9ADP, HB9AFH, HB9AFI, HB9AHL, HB9AJW, HB9BQI, HB9BQW, HB9BXE, HB9JAI, JA3IG, K5KG and W7SE) were active with two stations stations on CW, two stations on SSB and a fifth station for RTTY.

T3Ø Ron, ZL1AMO, could not resist the urge to travel and hand out QSOs to the deserving. This time it was for one week in May as T3ØRW from Western Kiribati.

1AØ A station signing 1AØKM in June (15 and 20 meters CW) caused a big pileup. Unfortunately he was a pirate.

Contacts by band / mode

Band	160M	80M	40M	30M	20M	17M	15M	12M	10M	Total
SSB	0	0	1915	0	4638	3336	4829	2974	2004	19696
CW	511	2231	2976	1707	5124	4809	7315	4553	3961	33187
RTTY	0	0	0	0	296	0	477	0	0	773
Total	511	2331	4891	1707	10058	8145	12621	7527	5865	53656

Ten years ago, the Spring of 2008

WWV numbers for the spring of 2008 were pretty poor. Solar Flux ranged from 65 to 79, and the A-index was as high as 57.

The only QSO of note in my log for the spring of 2008 was 4O3A. I noted in the log that it was the first EU on 10M in a long time.

Also active were:

ZS8 ZS6GCM activated ZS8T on Marion Island at the end of May for about 6 Months.

V8 John, 9M6XRO (V8FRO) and Gerben, PG5M (V8FGM) in a combined effort from Brunei for one week in April.

JD1 Masa, JA6GXK was active again (80-6 meters) as JD1BMM from Minami Torishima during May.

XX9 Tomas, LY1F (VK2CCC) was active from Macao as XX9TCC.

FH TX7LX was the callsign issued to Georg, DK7LX for his activity from Mayotte. He made 5115 CW QSOs.

4W The 4W6R DXpedition to Timor Leste went QRT after some 16,000 QSOs despite poor propagation and generator problems.

Member News

Awards

Jim Meade NOØB reports he was recently awarded WPX SSB (401 prefixes) and the following WAS endorsements:

- 40M WAS
- 80M WAS
- Digital WAS
- FT8 WAS
- 40M Digital WAS

Congratulations Jim!

Florida January 2018

Bob Lee WØGXA

I had the opportunity to visit two accomplished contesters during a trip to Sarasota to visit our in-laws. George K5KG and Dan K1TO both live in and around Sarasota. They're both great guys and I enjoyed the visit.

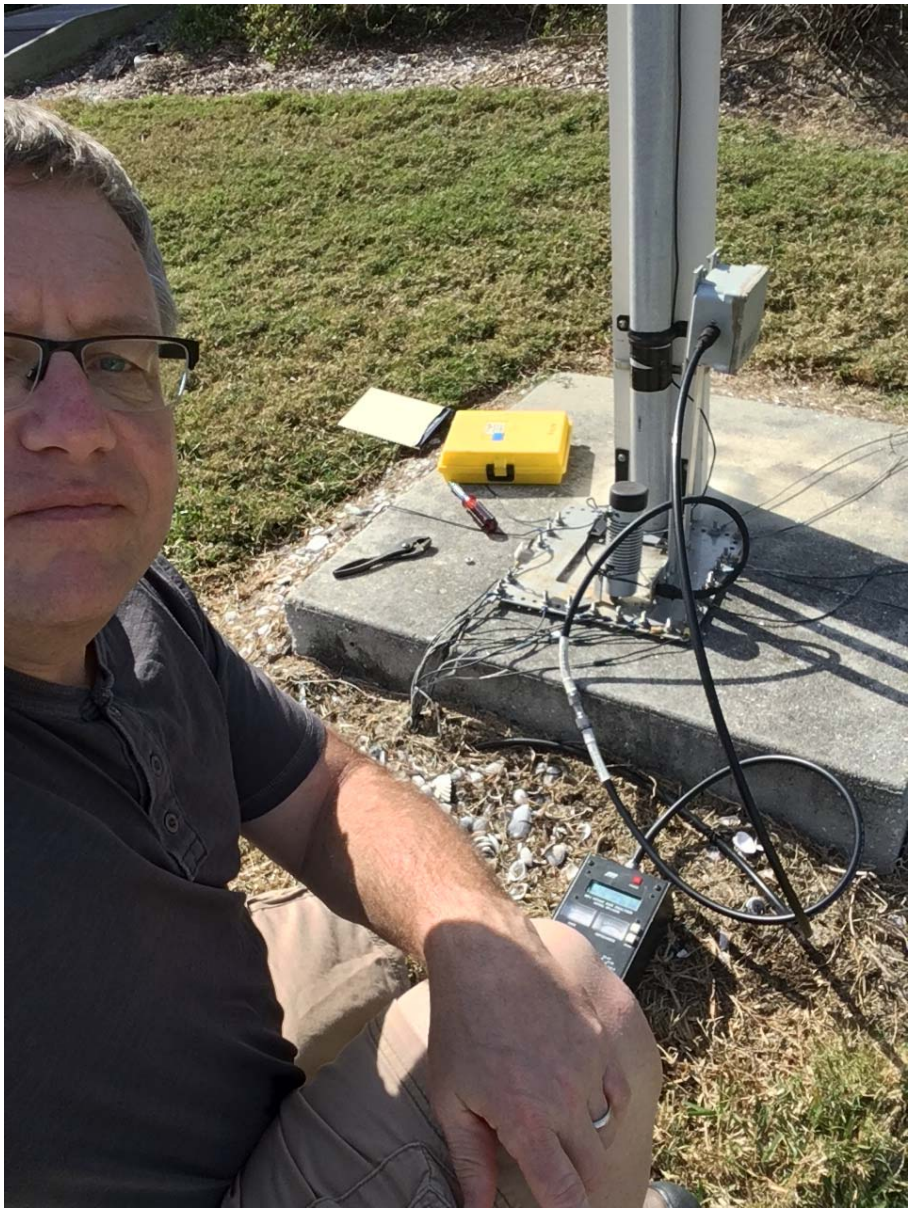
Thanks to Craig, K9CT for helping me get the visit arranged.

Below are a few pictures of me at K5KG's QTH. I went there to have a chat and he put me to work readying his 160m inverted L for the contest starting that day.

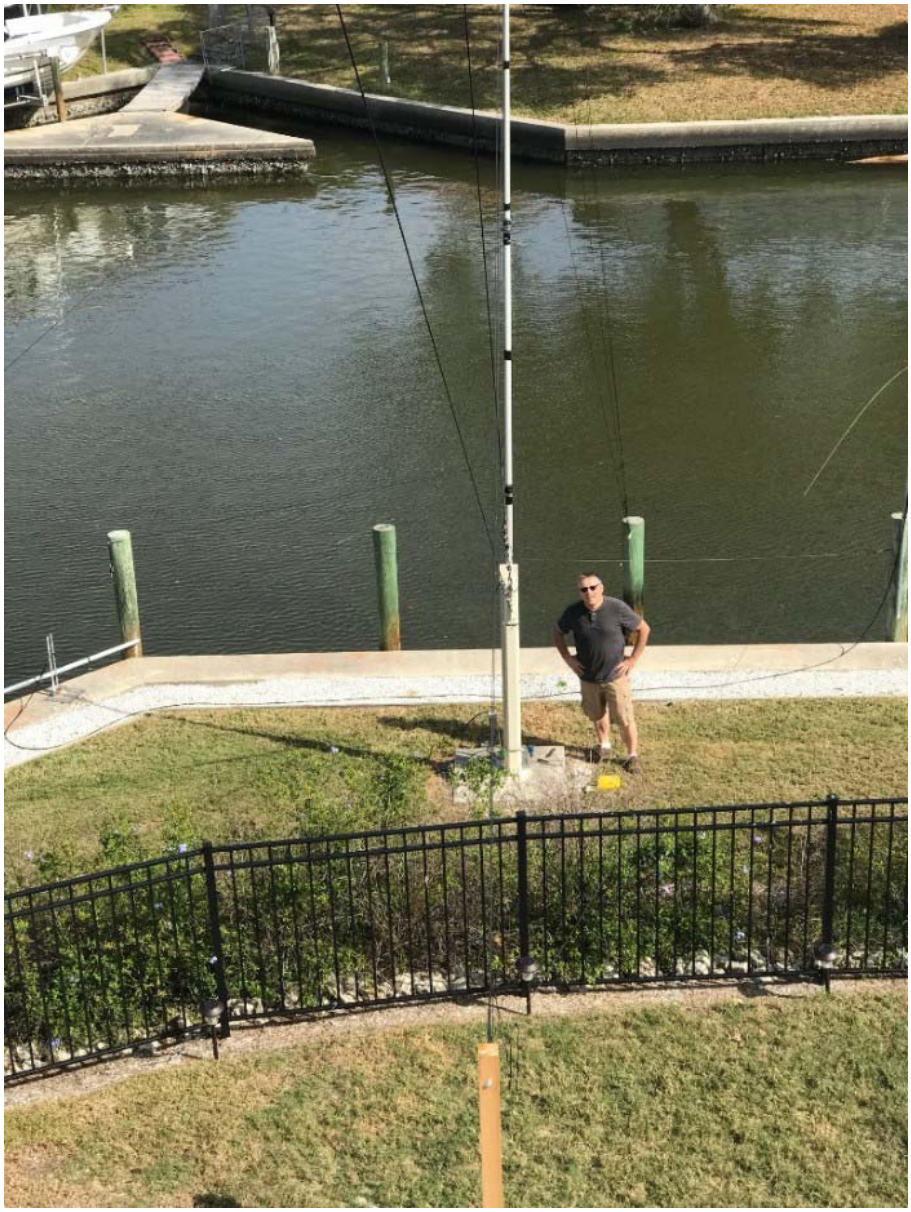
Part of K5KG's station

Tri-band antenna at 60'; 2-element 40m beam at 75'. 10m antenna fixed to SE while the ring rotor is down for service.

Left - part of the 160m inverted L; right - vertical mounted dock-side. All radials end in the salt water canal.



Me, working on the inverted L matching network



George's view from the tower

Hy-tower Modifications

Gayle Lawson KØFLY

Here are some pictures of my modified Hy tower that was installed last fall to be used on 160 and 80 meters. I decided to put the antenna up to improve my chances of a QSO with Bouvet.

The antenna uses twelve elevated "Gull Wing" radials as the counterpoise and has four top loading wires on the stinger. The radials are 77 feet long. The matching network and band switching relays are an accumulation of parts from the now defunct Collins

surplus store. The networks are housed in a plastic tote bin.

I used Tie wraps that are approximately 4 foot long and about 10 feet up the tower as radial wire supports, the radial wires are held in the air using electric fence insulators tie wrapped to trees (about 8 feet high). The radials are pulled tight at their ends.

The 160 meter 2 to 1 SWR band width is 60 KHz, a vacuum relay is used to switch band segments, this gives me a little over 100 KHz of operating range on 160.

Performance:

Most of my Butt Time has been on 160. I have made 82 DX QSOs in 44 entities not counting US and Canada, 31 are confirmed in LOTW with two confirmed with cards. I also worked 47 states with 44 being confirmed, a card is out for KH6.

On 80 I worked the usual European and JA stations. Most notable are Z6ØA, E31A (first call, has to be an accident on my part), ZC4 (ATNO) RI5Ø (Russian on South Shetland) as well as several LU and CE stations. The South American QSOs gave me some confidence that I may have enough signal to make it to Bouvet. Breaking pileups is much easier than with the dipole.

Rx antenna is K9AY loops, I need a better RX antenna, I'm thinking of a RBOG for next winter.

Thanks to KØDPL for his help.

Fly modified Hy Tower

Top-loading on stinger

Tie wraps on tower

Radial wire support

Logbook

Logs

WØGXA: Z6ØA on 20m. #281

NYØV: RY/FT8 - 3B9HA, BG2AUE, 9K2WA, 5T1A, 4L1MA, C93PA, YB1AR, VP8NO, RI1ANO, 9Q6BB, A92GE, TF2MSN, OX3XR, A61M, TR8CA, DS5USH, EA6VQ, J79WTA, V47UR, BV2EK, 9V1YC, **E31A**, EA9ACF, C31MF, D41CV, Z32ZM, **ZC4A**, Z6ØA, YBØMWM, **UK9AA**, D68I, Z61DX, JW2US, **5A1AL**,3G9A/MM, **EK1RR**, OD5/EA1CYK, A71AM, **J28PJ**, 5T2AI, 5WØLR, FK8GX, GDØTEP, and club members WØVX, KØVM, K8OM *Highlighted the ones that I think are the best catches on the bands either due to low sunspot conditions or just lack*

of operations from that entity - Tom

CQ Test

Contesting by Rick

Rick Heinrich NØYY

A Sleep Strategy for Contesters

I borrowed the following article written by veteran contester Randy Thompson, K5ZD for this issue of the EIDXA Newsletter. Anything I would have written would have been based on this article – so in the interest of keeping you informed – here is this issues Contest Corner offering.

A Sleep Strategy for DX Contests

from Randy Thompson, K5ZD on June 9, 2000

Why am I here? Listen to all these signals. Who are they? Wonder what they are doing? All this CW sure sounds nice. What should I do with this keyer paddle? Should I push this button? I can turn this big knob but what does it mean? Why am I here? There must be some reason, if only I could remember.

It is the 1981 CQ WW CW Contest and my first real attempt at single op DX contesting from the station of N5AU. Sunrise on Sunday morning is only minutes away. I remember waking up, sitting in front of the radio, and experiencing a disorienting state of confusion and wonder. Later, I learn from N5AU's mother that I sat there for over 15 minutes without moving. Finally, slowly, I was able to understand what I was doing and why. The "sleep drunkenness" abated and I returned to the rhythm of the contest.

There have been lots of articles that describe contest strategy and station design, but there is little about the mental and physiological aspects of the sport. Yet we have all known of, or experienced, contest

efforts that were cut short by an operator who could not wake up on Sunday morning. This article will present a strategy I use to get through DX contests with the minimum amount of sleep (and maximum score).

I have no medical experience or training. The ideas presented here are based on techniques learned in conversations with many successful contesters including N6TJ, N6AA, K5MM and others. I was also greatly influenced by an article which appeared in the November, 1988 issue of NCJ by Scott Johnson, KC1JI. Johnson was a Physician and sleep researcher at Harvard Medical School. As NCJ editor at the time, I was fortunate to have had the opportunity to talk with him and gain some additional understanding of sleep and its effects.

There is no magical or perfect technique for controlling the effects of sleep deprivation during a contest. Probably the most important aid is simply the knowledge of what sleep deprivation feels like. The more you understand the effects and how they influence your own mental and physical attitude, the better equipped you are to compensate for them.

Sleep Basics

There are a few basic aspects of sleep that are useful to know. Researchers have found that sleep is structured into approximately 90-minute cycles. A typical night's sleep typically has 4 to 6 cycles. Each cycle begins with light sleep, progresses into deep (or delta) sleep, and ends with dream or rapid eye movement (REM) sleep. The first sleep cycle has a predominance of delta sleep with a short period of REM sleep tacked on to the end. With each cycle, delta sleep diminishes and REM sleep occupies more of the 90-minute cycle. By the fifth cycle, sleep is almost totally REM.

Since REM sleep is associated with being closest to wakefulness, it seems logical that it will be easiest to wake up during this time. Since the first sleep cycle ends with a short period of REM, you want to try to time your contest naps to match the 90-minute cycle.

The body temperature falls during sleep and typically reaches its lowest point approximately 1.5 hours before the usual waking time in the morning. This minimum in body temperature coincides with the time of minimal alertness, if you happen to be awake. Lower body temperature is the reason that waking up just before sunrise during a

contest often includes a period of chills and uncontrollable shivering. As you become more awake, your body warms up, and the feeling of cold goes away.

Recently, I read a military training manual that presented some information on sleep and its effects. It presented several interesting "facts."

You cannot train for lack of sleep. In other words, there is no value in "practicing" sleep deprivation as a way to train the body to live without sleep. Under sleep deprivation, highly practiced skills will deteriorate more slowly than those which require new or creative thought. This explains why we can continue to do CW, copy call signs and send exchanges at the end of a contest, but may be unable to answer a simple question from our spouse.

Before the Contest

Contesting is hard work that places both physical and mental stress on the body. You can practice the mental skills of contesting by operating in lots of contests. As for the physical aspect, I divide my preparation into two parts: fitness and sleep.

Does your family or co-workers laugh when you tell them contesting is a physically demanding activity? It takes a lot of energy to sit up straight, talk or send CW, concentrate on listening, type on the keyboard, and reach all of the switches and knobs found in your station. Dick Norton, N6AA, uses a very good example which may make it easier to understand. A 48-hour contest is the equivalent of six 8-hour workdays. Imagine sitting at your desk at work for just one work day with little or no breaks and then multiply by six!

At one point in my career, I had a sales job that involved driving about 4000 miles each month. I noticed that the longer I did this job, the easier it was to sit up straight through a contest. My body developed the muscles required for sitting up during the hours and hours of driving.

Several years ago I got a bicycle and began by just riding to the end of the street and back. Each day I would go a little farther until finally I was up to 5, then 10, then 15 miles each day. It was fun. When Fall came and there was not enough light to go for long rides after work, I tried running. The aerobic workout of the bike made running easy.

Once again, I started just going down the street and back, then increasing the distance each week.

When the contests came, I noticed an incredible benefit of the exercise. It was as though the physical demands of the contest had disappeared! I was able to stay awake more easily and my muscles were not as tired during the contest. Without the physical drag, I was able to focus all of my energy to battling the mental fatigue. One result was a 48-hour effort (no sleep) from K3TUP for a win and new USA record in the CQ WW CW. In retrospect, any 3 hours of sleep would have cost me the record and possibly the contest. Another benefit of the exercise was 25 pounds of lost weight!

When my travel schedule made it impossible to maintain this exercise regimen, the weight came back and I noticed how much more difficult it was to get through the contests. You spend hours developing your station and operating skills. Can you ignore physical fitness as a component of a winning contest effort? For best results, you should begin your physical preparations a minimum of 12 weeks prior to the contest.

The sleep preparation for a contest begins five to seven days before the contest. The goal is to be as well rested as possible going into the event. I try to get as much sleep as I can each night during the week. While sleep cannot be "stored," the benefits of starting well rested are obvious.

The night before the contest I go to sleep as early as possible. I have learned that excitement, anticipation and nervousness will have me awake at dawn. Some people even take a sleeping pill Thursday evening to insure a solid night's sleep. Not knowing if there are residual effects of these pills, I have avoided this.

One questionable technique many people try is to stay up late on Thursday evening in the hope of sleeping late on Friday morning. This sounds like a good plan but there are several things at work against it. The body's natural rhythms, referred to as circadian rhythms, modulate the physiologic functions such as sleep, hunger, etc. If you normally wake up at 7 AM, there is a good chance that you will wake up at 7 AM the morning of the contest. If you stayed up late, you are just reducing the amount of sleep you are likely to get. Nerves and anticipation will increase the chance of waking early and not being able to fall back asleep.

I usually go to work on Friday morning. This keeps the mind busy (and off the contest). I try to get to the station in the early afternoon. I turn everything on, make sure it's all working, and then head off to bed for a nap. A 1.5 or 3 hour nap prior to the contest is crucial in making it through the first 24 hours without sleep. You may find it difficult to sleep with the contest only hours away, but it has to be attempted. I often practice relaxation techniques to help fall asleep. If I wake up early, I repeat the process. I want to wake up about an hour before the contest starts.

The last bit of preparation before the contest is a meal. I try to keep it light and not drink too much liquid. The goal is to have enough fuel to make it through European sunrise (0900z) without having to get out of the chair.

The First 24 Hours

For me, the first 2 or 3 hours of the contest are some of the most difficult. The nerves are on edge, adrenaline is flowing, and the body must adjust to the demands of operating. It is even harder when no one answers your CQ and all that energy must be channeled into a search & pounce effort!

I have two simple goals for the first 24 hours of the contest: operate as much as possible and maximize the score. For most contests, I am out of the chair no more than three times for a total of less than 15 minutes in the first 24 hours. I do not even consider sleeping. By pushing so hard the first night and covering all the bands, I usually have a good multiplier and understanding of the available propagation. This will be important when planning the sleep strategy during the second night.

If you do need to sleep the first night, the best time (from the Eastern USA) seems to be the hours between European sunrise and local sunrise. The 09 - 11Z hours are often very low rate multiplier chasing. You can sleep for 90 minutes at a cost of approximately 30 contacts and 10 multipliers.

If you can arrange your shack so that you can see the sun rise through a window, this can be a great lift. There is something about seeing the sun come up that energizes the body and improves alertness (remember those circadian rhythms). It also keeps you in tune with

when you should make the last low band sweep for multipliers before moving to the higher bands.

I also use the full 24 hour first day effort as a form of motivation. We began noticing at the K5RC multi-single efforts that we could predict our final score based on the 24 hour score. My formula is to double my 24 hour score and add 10 percent. For example, if I have 1.8 Million points after 24 hours, I estimate my final score to be 3.6 plus 10%, which is just under 4.0 Million. My focus for the remainder of the contest is to make that formula come true!

Much of contesting is a series of mental games. Each one designed to give a short term target that maintains focus on increasing the score. Trying to maximize my 24 hour score provides a big boost for me during late Saturday afternoon when the first signs of tiredness begin.

The Second 24 Hours

I am convinced almost anyone can get through 24 hours of contesting just on their love of the game. But the second day requires a solid commitment, desire, and preparation. The fact that contesting is a solitary pursuit both helps and hinders the participants. It helps because the scores of other participants are not known, which makes it easy to justify continuing. The enemy is fatigue which will cause doubts and questions on whether it is even worth continuing! Or, as Vince Lombardi once said, "Fatigue makes cowards of us all."

The top competitors have committed themselves to the contest. They know they must go on no matter what. It's not easy, but this little fact will help them ride through all but the worst problems. Everyone feels the same pain and effects of sleep deprivation. It's really a question of how bad you want to win.

I notice that my commitment to a contest often starts many weeks before the contest. As the contest approaches, I become more focused and more committed to doing a full effort. The build up and motivation gained over the weeks makes it almost impossible to give up or stop.

Maybe it is just a mental let down, but it always seems as if the propagation and activity take a dive immediately after 0000z. Rates are slow because many Europeans have gone to bed and the South Americans have all been worked before. By 01 or 02z, it is becoming a

battle to stay awake.

Stu Santleman, KC1F, recommends that this is an excellent time to catch some sleep. "Sleep when the Europeans sleep," he suggests. I disagree with this since it is also the last opportunity to catch many Europeans on 160 and 80 meters. However, I do feel it is a good chance to take some time to recharge your batteries. I usually take 30 to 45 minutes during the 01 or 02z hours to take a shower and eat dinner. The shower wakes me up enough to get through the crucial hours of European sunrise. I eat sitting at the radio tuning for multipliers.

After European sunrise, about 0900z, the contest really slows down. Attention is split between random CQing and tuning for new multipliers. Here is where commitment will be really tested!

I base my sleep strategy on the activity and propagation that was available during the first night. I know what multipliers I am missing on the low bands and can decide if sleep is more important than taking the chance of finding them.

Once the decision to sleep is made, it is important to get right to bed. Don't waste time trying to think about the contest. When you lay down, clear the mind and fall asleep as quickly as possible. Set the alarm for either 90 or 180 minutes later to take advantage of the natural sleep cycle. If you try to wake up from deep sleep, a form of disorientation I call sleep drunkenness may result. Worse than the hallucinations and disorientation is the real possibility that you will go back to sleep without ever waking completely up. This has happened to me twice. One time I even had a conversation with a local multi-op on two meters (so they said, I can't remember it at all) and woke up four hours later in another room of the house. This fear of not waking up is usually the real reason I try to stay awake and keep going!

When you wake up, you will probably feel very cold. Be prepared for this by having something warm to drink available and a sweatshirt or sweater you can pull on. Take a few minutes to get fully awake and eat something. Once you sit down at the rig, you must plan to be there until the end of the contest (with only short breaks). As soon as the sun comes up or you pass your normal wake up time, it is easy to stay awake. The battle is in the minutes or hours before dawn.

The last 12 to 13 hours of the contest coincides with my normal rhythm

for being awake. The only difficulty is fighting the effects of sleep deprivation. These are not usually obvious at the time. However, there is an easy way to see just what the loss in mental sharpness is. During the next DX contest, tape record a run during the first morning. Then tape record a similar time the second morning. After the contest, play the two tapes back to back. You won't believe how much your call sign recognition and ability to get calls on the first try is degraded! Unfortunately, there is not much you can do except recognize the problem and work through it.

More Tips

There are a number of other techniques that you may wish to use as part of your sleep strategy. One suggested by W2SC is to try taking very short 10 minute naps when you feel sleepy. This appears to offer some rest yet does not allow you to fall so far asleep that you cannot wake up easily.

Notice that I did not mention the use of caffeine in my strategy. I am not a coffee drinker so I can't speculate on its effects. As I get older I am finding it much more difficult to fight through the need for sleep. As a result, I have occasionally taken a caffeine pill (such as No-Doze) to help stay awake. I take 100 mg of caffeine at the lowest point of each night. Caffeine can upset your stomach so it is a good idea to eat something at the same time.

I have had some success with combining caffeine with the short nap technique. I take the caffeine and then sleep for 10 minutes. The effect of the caffeine and the nap seem to complement each other as a way of getting some rest and yet waking up with a clear head.

I think it goes without saying that drugs and alcohol should not be used during the contest. Alcohol is a depressant and will cause you to fall asleep (not to mention interfering with the mental energy you need to win).

One area of contest physiology that I have not studied is the effects of diet. I find that I eat and drink very little during the course of the contest. Working stations is like potato chips for me -- I can't stop! Several times during the contest I will suddenly realize I am starving, and yet I keep wanting to work just one more station before taking a break. And one more. And another!

Not drinking very much has the benefit of reducing the number of trips to the bathroom. However, this must be balanced against the danger of dehydration. I have lost as much as 5 pounds during the course of one contest! If you have discovered a successful contest diet, share it with me!

After the Contest

One thing I have always been amazed by is the adrenaline generated by the excitement of the end of the contest. The pressure of the last two hours is trying to push the score on the computer screen over the next milestone. Should I call CQ or tune? Or a combination of both. When it's over, I am tired and almost incoherent (just listen to the single ops on 3830 for proof). Afterwards, I can't fall asleep for several hours. If only we could bottle that feeling!

Expect any contest effort of more than 44 hours to require several days of recovery. I usually sleep for 12 to 15 hours after the contest. And I still feel sleepy until about Wednesday!

I hope the ideas presented here are of help to you in your next serious DX contest effort. As long as DX contests are 48 hours, the serious single operator entrants must deal with the effects of sleep deprivation. Good preparation, serious commitment, and a well-tuned sleep strategy may be just the edge you need to beat your competition.

Randy really lays out a detailed approach to a sleep strategy and the effects of sleep on contest performance. I have a couple of other observations to offer.

1) Bright Light – as evening approaches and light levels drop the body produces Melatonin. This is part of the natural “sleeping pill”. One way to avoid the body producing Melatonin is to keep artificial light bright in the operating area. This is not a bright desk light – but room light.
2) Flickering Lights – lights that follow CW characters or voice peaks create a level of fatigue. This may not be noticeable during day one – but it is a huge impact the second night when rates decline. The flickering creates a “hypnosis” effect that dulls your responses that are already taxed.
3) Many of these same techniques work for multi-operator contests.

Set operating shifts remembering the 90 minute cycle. But I also add 30 minutes in front and back to allow sleep and wake cycles. Remember what Randy said about being cold as your body warms up and you become more aware? That is the reason for the time before and after.

To do well in a contest it is an issue of “butt in chair” and a sleep strategy is critical to that overall plan.

Go Contest!

QST QST QST

Iowa QSO Party

Mark your calendars:
Sept 15, 2018

Thanks to the Story County ARC for their sponsorship.

Upcoming Contests:

Get all the latest contest info here

Scores and Soapbox

WØGXA: ARRL DX CW
I spent the contest in NØNI's basement working low bands. On the first night, Dave, WØFLS and I worked 80m and 160m. I think we had 300 Qs on 80m when I was relieved. Second night, I was solo on 40m. In 12 hours I put 200 Qs in the log. It was a long slog...The band was OK but the guys the night before had worked 600 stations on 40.

NUØP (NØMA): WPX SSB - *"Snow storm edition"*

Call: NUØP
Operator(s): W7II WØIY WBØLJK KX9Y
Station: NØMA

Class: M/S HP
QTH: IA
Operating Time (hrs): 14

Summary:

Band	QSOs
160:	12
80:	41
40:	76
20:	116
15:	52
10:	0

Total: 297 Prefixes = 214 Total Score = 181,044

Due to solar and atmospheric storms we had to call off our club effort for this WPX. Ten inches of snow with high winds made it dangerous to reach the club station in the country.

Thunder snow made 80m and 160m impossible to use Friday night. Band conditions were very poor the next day until Saturday afternoon when 15m opened up. But skewed paths were the rule. Had to point the antenna SE to hear EU.

160m and 80m were very quiet Saturday night but very little EU was heard. Like another station reported, it was like a NAQP contest. The road to the station was finally plowed late Sunday afternoon. Spring? It's just a myth.

Friday night report from Barry WØIY:

The bands suck - really bad. Bill and I could barely get things going S&P. Tried calling CQ and no luck.

Then at 1030pm there was ZS6CCY from S Africa S9 and rock solid??????

Solar storm in progress and wx going to crap in metro Waubeek.

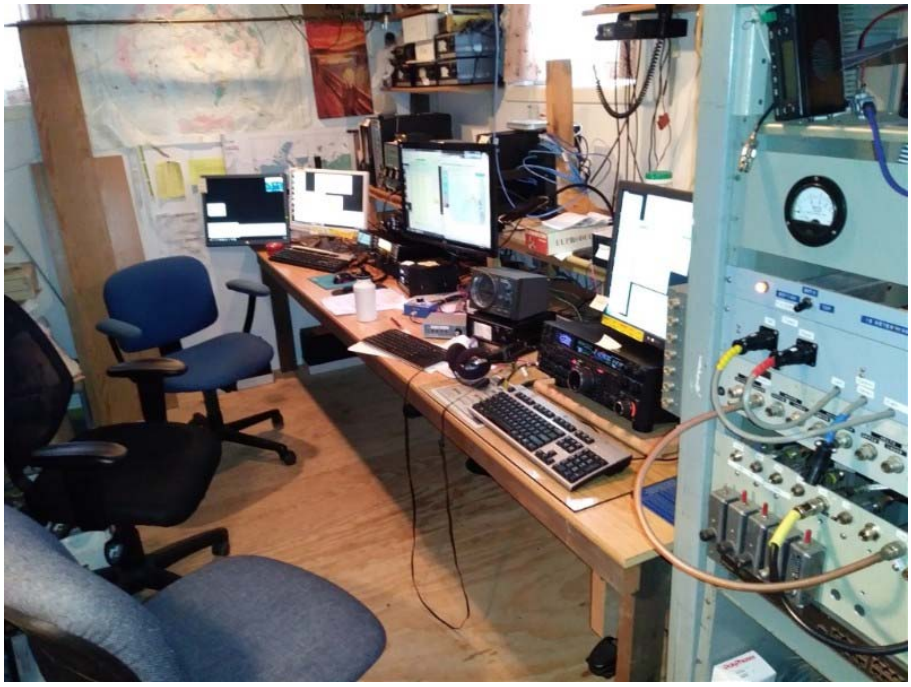
11pm, on 40m slugging it out for SA and Carib stations. At one point the band noise was just going swish-swish, not real strong, but nearly no signals. I tuned across 40m and heard maybe 3 stations. Went back to see who was strongest: CN3A in Morocco!

Contemplated pulling the plug for the night, but worked a few US stations. About 11:20 working rare Ohio, the guy says to me "You switched your antenna" you're really strong now, except I hadn't. Then he was up/down with QSB and suddenly the band was alive. Spots for EU and I worked a few really weak ones. Got a KH6 who said "You swung your beam". Well sort of.

Managed a Czech then the latest spot was 5W1SA in Samoa. Took about 3 calls get him.

Midnight and the static is horrible from blowing snow. Sounds like a couple chain saws.

1220 and QRN is quiet again, hearing IR6T calling. Will see if the band holds for awhile.



NØMA - Empty chairs

Winter wonderland

40m 4-square with optional propagation enhancement snow

QRM

North Brevard Amateur Radio Club help the homeless in cold weather

The New Year began with a bitter cold front over the City of Titusville as well as much of Central Florida. This cold is typically concerning because there is small group of people that wander the streets in Titusville. The Homeless.

The National Weather Service announced severe cold weather warning for January 3-4 with temperatures below freezing. Also announced though a Facebook post was the Disabled American Veteran Center in Titusville had opened up their doors as a cold weather shelter and was offering a warm place to sleep and meals, this all worked out perfectly and the next actions was just the right thing to do.

In many communities around, there are homeless that wander the streets and they are always subject to the elements. In particular, cold weather can be extremely dangerous and this was simply unacceptable. A group of North Brevard Amateur Radio Club (K4NBR) (http://www.northbrevardarc.net) members decided to act without hesitation.

Club members, with the spirit community in mind, Ricky DeLuco (K4JTT), Robert Ortiz (KJ4VEH), William Klosowski (K4SVT), and Michael Ellixson (KE4MWZ) set out to do a small part. The team set out in their own vehicles and fuel expenses searching around the city of Titusville for the homeless. Using Amateur Radio as communications, the North Brevard Repeater Located at Parish Hospital and Michael Ellison as Dispatch Net Control, they worked in the cold and wet restlessly over 12 hours driving over 120 miles just around Titusville spanned over the next two evenings.

As the quest began they notified the City of Titusville Police Department so they were aware and in hopes of any on-duty officers could reach out. What happened next was unexpected and welcomed. The group was able to locate five homeless throughout the city that first evening and give them a ride out in the elements. They were also called by the city police department twice to help and provide transportation for others that were located by on duty officers. All that were found wondering the streets in the very cold and dangerous weather were voluntary transported to the Titusville DAV center where they were cared for by such a wonderful staff. One additional homeless person was located late that first night to quickly discover he had the need for immediate medical attention and was transported to Parish Hospital for help. The following evening the team was at it again out and searching and was able to find and help several more over to the DAV facility for the evening.

The North Brevard Amateur Radio Club (NBARC) is a Community Service Organization sanctioned by the American Radio Relay League

(ARRL). They provide Radio Communications in times of a declared emergency for community services. The NBARC is involved in several community events and provides backup communications to Parish Hospital. If you are interested in learning more about the club and Amateur Radio Please visit www.northbrevardarc.net for futher details or be our guest at one of our monthly meeting posted on the web site.

Pacific island villagers get electricity and water storage

Date : 13 / 01 / 2018
Author : Jim Linton - VK3PC
A radio amateur from Far North Queensland has achieved a lot for a remote village while on holidays in the Solomon Islands. Shane Lynd VK4KHZ visits the village of Busuone once a year, and has been helping to build a guest house/holiday home and teaching a couple of the locals about amateur radio.

Shane VK4KHZ was there for five weeks and taught a couple of the local teenagers who want to become H44 amateur radio operators some basic amateur radio techniques and operating. During openings on 6 metres there was also a keen bunch of local on-lookers with many asking questions such as where is that person? One local in particular, Gibson Laeni, after several days of observing, was

confident enough to grab the H44DA microphone and call CQ under supervision. With some further assistance, Gibson could become the first Busuone ham in the future.

Shane's volunteer work included the purchase of two diesel generators, the installation of 300 m of underground electrical cable and switchboard to provide reticulated power. All homes in Busuone village now have electric lighting and at least four general power outlets. In addition he purchased and installed two polyethelene water tanks and provided guttering and downpipes to the house in order to capture as much rainwater as possible. The village girls used to collect water daily from a remote freshwater stream which is fair distance from the village. Two days after the water tanks were installed monsoon rain filled the main water tank to capacity.

He also installed a proper flushing toilet (known by the villagers as the white-man toilet) and a septic tank in order to provide some creature comforts for future tourist or visitors.

From the junk pile

Tom WB8ZRL

I have several antennas just collecting dust in the shed that I would like to see up in the air at some deserving DXer's QTH. I would like $20 each for them. Pickup only.

I have a HyGain 204BA, 4 elements on 20M. This beam worked much DX when I was in Omaha, and was last pressed into duty at W0AWL's QTH to work BS7H.

I have a Wilson DB43 duo band beam. Four elements on 15, three elements on 10 on an 18 foot boom. Each band has a separate feed point.

I have a HyGain Discoverer 40M 2 element beam. This beam needs some replacement aluminum and at least one of the element to boom brackets. This was an awesome beam and the major reason why I have over 340 countries confirmed on 40.

And I have a Collins (yes, Collins) 3 element 20M beam.

My Pioneer stereo amp finally quit after 40+ years of heavy service. The schematic shows two 70 volt CT transformers each with a 3 amp fuse in the primary line. I suspect that much of the weight of the amp is in these transformers. If there is a builder/experimenter who might wish those transformers, I would love to give you the amp.

Shoes and Morse Code

Just when you thought you'd seen everything...
(click here)

Thanks for the content. The newsletter is only as good as you make it. Keep those cards and letters coming. - Ed.
