

INDEXA

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Spring 2022

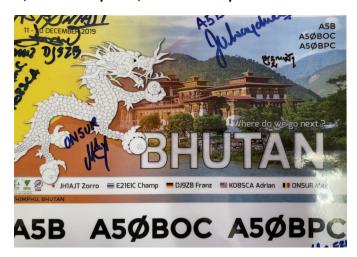
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Issue 135

A 501(c)(3) non-profit organization for the enhancement of amateur radio, worldwide peace, and friendship

INDEXA

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Bhutan: The Land of the Thunder Dragon

"The arrow of the accomplished master will not be seen when it is released, only when it hits the target." Bhutanese Proverb

As the plane was approaching Bhutan, after a three-hour flight from Bangkok, I was gazing in awe through the plane window at the snow-capped, majestic peaks, 8,000 meters high, of the eastern ridges of the Himalayan Mountains. Although the altitude of the plane was 11,000 meters, it felt as if the wings of the plane were almost touching the mountain peaks. It was an impressive, unforgettable sight.

Anyone who has flown into Bhutan's Paro International Airport, situated at an altitude of 2,200 meters, is familiar with the rollercoaster landing and we were preparing for it. Some passengers were tightly holding their cameras, while others were tightly holding on to . . . their seats.

The short landing strip, surrounded by very high mountains, and the unexpected gusts of wind, make the airport approach extremely difficult. Drukair, the Royal Bhutan Airlines, says that there are only a handful of pilots who are certified to fly the Airbus A319 plane into Paro.

A short video of the landing could be found on YouTube at: https://www.youtube.com/watch?v=SbLHah4XUwk

Bhutan:

Bhutan is a constitutional monarchy, a small mountainous kingdom, in South Asia, nestled between India and China, with Buddhism being the official religion and with a population of about 750,000 people, many of whom live in its capital city, Thimphu.

Bhutan is the only country in the world to have outlawed tobacco, and the Bhutanese government uses Gross National Happiness rather than GDP to measure its overall health.

It is interesting to learn that Bhutan does not have one single traffic light; a policeman actually directs the traffic in the capital city.

Most of the subjects studied in the Bhutanese schools are taught in English with a few subjects taught in the official Bhutanese language Dzongkha. So almost everyone we met had a good command of the English language, allowing us to communicate and better understand the amazing culture and customs of our hosts.

(Continued on Page 2...)

inside...

We remember Former member of the INDEXA Board of Directors and Past ARRL Chief Development Officer Mary Hobart, K1MMH, SK

Many tourists visit the country to see the famous Buddhist temples and to hike the many beautiful valleys and mountains, and a few of them are even attempting to trek the difficult Snowman Trek. In 1993, however, the Bhutanese government started to limit the number of tourists that visit the country each year, in order to preserve the unique Bhutanese way of life.



A50BOC team members holding the INDEXA flag

The Team:

Our DXpedition started on December 11, 2019 in the Bangkok airport (Thailand) where the team members from 5 different countries met after long flights from their home countries.

The team of 4 people Champ (E21EIC), Franz (DJ9ZB), Max (ON5UR) and Adrian (KO8SCA) was led by Zorro (JH1AJT) and his indispensable assistant Ishida Hiroaki.

We were not in Bhutan to tackle the difficult and world-famous 25 day Snowman Trek, but we were there to undertake a similarly difficult task: to put Bhutan on the air in the low bands.

Judging by the amount of equipment that we loaded into the truck at Paro airport, we were prepared to make a full-scale effort.

Bhutan is listed at 101 position on the ClubLog DXCC Most Wanted

List and at position 90 on Low Bands on the global log, but for North America, on Low Bands, the position drops down to an incredible number 12! As Zorro was in Bhutan in an official capacity, the team was welcomed at the Paro Airport, which sped up the customs and immigration process. And that was a nice surprise, since we were bringing such large quantities of radio equipment, and other materials, including a telescope that Zorro donated to the local college.



At 2200 meter high, the airport in Paro, Bhutan is certainly unusual and beautiful

The small truck that took the team from Paro Airport to Royal Thimphu College was full of radio equipment

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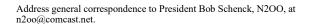


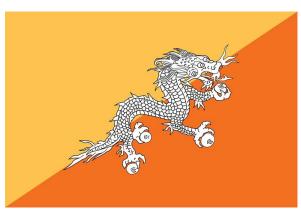
INDEXA

Editor & Publisher Steve Molo, KI4KWR 13063 Oliver Lane Madison, AL 35756 USA

Distribution & Circulation Hal Turley, W8HC 2309 Lincoln Avenue Saint Albans, WV 25177 USA secretary@indexa.org

Membership applications are available at: www.indexa.org/application.html





The Flag of Bhutan

The Operating Location:

"Kuzu zangpo la!" says our driver, Kuman, welcoming us into the car. Kuman, dressed in the beautiful Bhutanese garment, a long robe called "Gho", took us from Paro airport to Royal Thimphu College (http://www.rtc.bt), located on the outskirts of the capital city. This was to be our comfortable home for the next 10 days in Bhutan. We were housed on the student campus, which was almost deserted because of their students' winter holiday. Kuman was our designated driver during our stay in Bhutan and we used this opportunity, during our time off from the radio, to visit some of the interesting and famous sites around the capital city.



The Royal Thimphu College gate architecture is amazingly beautiful

We also had the luck to be in Bhutan during the Bhutanese National Day, on December 17, and managed to see the National Day Festivities in the large city stadium, an impressive display of culture, dancing, tradition as well as local foods from the 20 Bhutanese districts, "Dzongkhags", around the country.

Our first dinner in Bhutan consisted of the national dish, Ema Datshi (chili peppers and cheese), which was followed by Momos, Tibetanstyle dumplings with minced meat, cheese and cabbage. Bhutanese's love of chili peppers, "ema", is obvious: to be considered delicious, the food, be it breakfast, lunch or dinner, has to be spicy, very spicy! If you are not from Bhutan, it takes a while to get used to the pleasure-pain of chili peppers.

Radio Equipment:

Royal Thimphu College, the first private college in Bhutan, also houses a radio club and a few radio towers with antennas for multiple bands. The radio club was created to allow access by young Bhutanese college students so they would be exposed to the wonderful world of ham radio.

The radio club uses a myriad of products of international engineering to create the amazing world of the amateur radio pileups: Japanese engineering for radios, Icom 7610, Icom 7300 and TS590S; Italian and Bulgarian engineering for amplifiers Expert 1.3KW and ACOM 1000; Russian engineering for HF passband filters from LBS; Ukrainian technology RigExpert AA-600 for antenna analyzer; and USA technology for logging and FT8, N1MM and WSJT software.

Because the Icom IC-7610 radio has RX antenna inputs, an impressive S/R noise ratio and a large pan-adapter, this radio was dedicated to the 160M band.



Bears are living in the forests around the Royal Thimphu College



The radio shack (top right room) and living quarters for the A50BOC team

Antennas:

Tower 1 (20mH)

- 5el Tri-bander model 318C (20m-15m-10m) by Creative Design Corp.
- 3el Monobander model CL40B-5 (40m)
- by Creative Design Corp.
- Rotator RC5B-3 by Creative Design Corp.



Young Bhutanese men are helping with antenna installation under Champ's (E21EIC) supervision



Adrian (KO8SCA) and Franz (DJ9ZB) installing 160M vertical transmitting antenna

Tower 2 (Roof Tower)

- 3el Tribander model T3-3VX (30m-17m-12m) by Nagara
- Rotary DP model CD-78 (80m) by Creative Design Corp.
- Rotator RC5B-3 by Creative Design Corp.

Tower 3 (Roof Tower)

- 3el Tribander model 318 (20m-15m-10m) by Creative Design
- 8el Monoband model CL6DXZ (6m) by Creative Design Corp.
- Rotator RC5B-3 by Creative Design Corp.

In the first days of the DXpedition, the team installed additional antennas:

- Rotating 80M dipole by CD-78 Creative Design, Japan (http://www.cd-corp.com/eng/ama/low-v_eng.pdf_)
- 160M transmitting antenna (Spiderbeam vertical with top loading) (http://www.spiderbeam.us/product_info.php?info=p250_160m% 20Wire%20Vertical%20kit%20including%2018m%20fiberglass%20pole.html)

- 60M homemade dipole

720 feet long DX Engineering Beverage receiving antenna and preamplifier https://static.dxengineering.com/global/images/instructions/dxe-bfs-1.pdf



With Zorro's help, the Royal Thimphu College Radio Club has a few radio towers and antennas



After a long day of work installing antennas, the A50BOC team is thanking the young Bhutanese men for their help



The RigExpert AA-600 antenna analyzer helped tremendously in tuning the new 80M rotating dipole

(Continued on Page 5....)

The noise level around the campus is S7/S8 so we had to move the Beverage antenna a few times, further away into the forest, to find a spot that decreased the noise level to about S2/S3 and increased our chances of working weak stations.

Although the temperatures outside were low, we were lucky to have had good weather to install the new antennas. A few young Bhutanese men were genuinely interested and curious about amateur radio and helped us tremendously with the antenna installation.

The majority of the radio equipment was donated by SEISA GROUP, founded and run by Mr. Zorro Miyazawa (JH1AJT). Over the years, during each visit to Bhutan, Zorro brought additional equipment for the radio club and was able to build an impressive arsenal of radios and antennas to help overcome the difficulties that arise from trying to make QSOs from a country surrounded by the tallest mountains in the world. Together with Zorro, Champ (E21EIC) has visited Bhutan 15 times and because of that he knows all the details of the location, the antennas and the radio equipment, which allowed the team to start operating during the first day of our arrival.

Zorro was able to obtain Bhutanese personal amateur radio licenses and call signs for all DXpedition team members as well as privileges for the team to operate, for the first time ever from Bhutan, in the 60M band, where the team was able to make over 1000 QSOs.

Our Team Leader:

In his capacity as the official Olympic Consultant to Bhutan, Zorro had meetings back to back almost daily with the Bhutanese officials, but he always found time to also enjoy operating the radio, especially during the night and during the 160M band openings to Japan. Zorro has been visiting Bhutan for many years, and, through his position as CEO of SEISA and FGC (Foundation for Global Children), he is helping Bhutan to qualify and participate at the Olympic Games, which this year will be taking place in Tokyo, Japan.

Bhutan has been previously participated in 1984 at the Los Angeles Olympic Games as a wild card, but this time with Zorro's help, by his providing access to trainers and infrastructure, one Bhutanese athlete in Archery was able to qualify to the Olympic Games in Tokyo.

In addition, Zorro has supported the establishment of Paralympic Committee and development of Paraathletes in Bhutan. Bhutan Paralympic Committee is one of the most active committees in the world which is working on the development of youth to participate in Paralympic Games. Zorro is working closely with the president of the Bhutan Paralympic Committee, HRH Princess Euphelma Choden Wangchuck, and was able to help Bhutan participate in the Paralympic Games for the first time and that was not an easy achievement in a Buddhist country where handicapped persons feel ashamed and tend to stay mostly indoors.

Our DXpedition special event callsigns reflected these activities: A50BOC and A50BPC where BOC stands for Bhutan Olympic Committee and BPC stands for Bhutan Paralympic Committee.

The Prince's visit:

The highlight of our DXpedition was the visit of HRH Prince Dasho Jigyel UgyenWangchuck of Bhutan, his sister and his entourage to the Royal Thimphu College radio club station. On December 18, 2019, the Prince, who is the half-brother of the King of Bhutan and a good friend of Zorro, spent some time in front of the radio with Zorro's guidance to make a few QSOs with his own callsign (A5B) with some (lucky) Thai amateur operators.

It is indeed a rare encounter for someone to witness such an event or to be able to make a QSO with such a personality. Some hams around the world were lucky enough to have worked with other personalities that are also ham operators, such as (JY1) His Majesty the late King Hussein bin Talal of Jordan (SK), or (EA0JC) Don Juan Carlos de Borbón, the former King of Spain.



The army personnel and security detail that were part of the Prince's entourage were also interested to hear about ham radio and our team took the time to explain how it all works and how it differentiates from the radio communication that the army is using.

The DXpedition team presented the Prince with memorabilia connected to the activation of Bhutan with the call signs A50BOC and A5B as well as a copy of the book DX-WORLD-GUIDE, written by Franz DJ9ZB.

Zorro presented the Prince with an impressive gift: a 236-years-old Japanese samurai sword made by a famous Japanese swordsmith. It was not only an amazing gift, but for obvious reasons, also an incredibly difficult item to take out of Japan, and much work was required by Zorro and his office team to ensure that everyone at customs in Japan, Thailand and Bhutan were informed correctly about this rare item.

This gift was partly in response to Zorro's receiving as a gift from the Prince, during his previous visit to Bhutan, a beautiful traditional Bhutanese Patang sword, made for the King of Bhutan.

(Continued on Page 6...)

Statistics:

Many of the A50BOC DXpedition statistics are available on ClubLog (https://clublog.org/charts/?c=A50BOC#r) but here are a few highlights:

Total number of QSOs: 10707

Total number of 160M/60M QSOs: 936 /1184

Mode distribution (approx.) CW/SSB/FT8: 25%/25%/50%

Almost 20% of our QSOs were an ATNO

Continent distribution EU/AS/NA: 75% / 20% / 3%

Final Words:

The difficulty of operating from a country surrounded by tall mountains, during a solar minimum with many hours of total RF silence and our focus on low bands operation, showed up in the total number of QSOs as well as the large number of FT8 QSOs in our log.

Our main enemy on low bands was the omni-present RF noise that burdens our modern society and after many trials and errors with RX antennas, we were able to overcome this obstacle toward the end of the DXpedition.

Our main goals were achieved: putting all continents (including NA) in the low bands in our log, improving the radio club station with additional equipment and antennas, and operating for the first time in the 60M band. But above all, having fun with the radio and making new friends is usually the best outcome of any DXpedition and A50BOC was no exception to this rule.

The club station is still there, and Zorro and his team will continue to visit Bhutan a few times a year, adding this rare entity in the logs of the deserving. This is most likely just the beginning, the tip of the iceberg, of more amazing things that will be happening in the Land of the Thunder Dragon!

December 2019

A50BOC & A5B team: J1AHT, E21EIC, DJ9ZB, ON5UR & KO8SCA

Written by Adrian, KO8SCA



Former member of the INDEXA Board of Directors and Past ARRL Chief Development Officer Mary Hobart, K1MMH, SK

by Bob Allphin, K4UEE

If you ever meet Mary, you immediately liked her. Mary Hobart was businesslike and dedicated, yet cheerful, and friendly. And after becoming licensed as K1MMH she became an accomplished operator. Literally hundreds of fellow ham radio operators will miss her. She passed on December 12, 2021, at the age of 78.

Mary moved to New England to work in development at Connecticut Public Television (CPTV) and then at ARRL. From the time she arrived at ARRL Headquarters, Mary served enthusiastically as ARRL's Chief Development Officer, developing relationships that helped to grow the ARRL Endowment

During her 13 years at ARRL Headquarters, she was behind the creation of The Diamond Club, The Diamond Terrace, The Maxim Society, and the Second Century Campaign, among other initiatives. She served as secretary of the ARRL Foundation, and promoter of the ARRL Spectrum Defense Fund. Then-ARRL Chief Operating Officer Harold Kramer, WJ1B, said in the August 2014 issue of *QST*. "Because of her efforts and those of her staff, she has raised millions of dollars for ARRL and, ultimately, for the benefit of Amateur Radio."

She retired from ARRL in 2014, moving back to the Philadelphia area to be closer to family. She was invited to become a member of the Board of Directors of INDEXA and served for several years. Her experience in fund-raising and member communications was very valuable.

She once said that one of the highlights of her ham radio experience was operating at PJ2T in 2009. She helped the Southeastern DX Club win the ARRL Phone contest in the M/M class.

Outside of work, she was an enthusiastic gardener, an avid rower, and a huge fan and booster for University of Connecticut Women's Basketball.

Rest In Peace Mary, you will be missed!

88/73





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Latest DXpedition News Swains Island DXpedition W8S



DXpedition W8S Swains Island IOTA OC-200



4th of November 2021

Subject: Swains DXpedition postponed

This week the W8S team had another conference call about the planning for the upcoming DXpedition to KH8/s Swains Island.

Due to the Covid-19 restrictions, it will remain impossible to travel to American Samoa in the coming months.

The limited number of flights, only 5 the first quarter of 2022, from Hawaii to American Samoa with the additional restriction to do a Covid-19 test 5 days before departure in Hawaii makes travelling extreme difficult. Also tourists have a lower priority to buy a ticket.

The risk is too great to travel to Swains in the spring of 2022.

Two members of our team are also part of the 3YOJ Bouvet team scheduled for November/December 2022.

The entire team therefore had to decide to postpone the W8S Swains DXpedition until March 2023.

This is the only opportunity to be on Swains for 15 days with the same team as our original plans in 2020.

Our project has certainly not been canceled but postponed to the spring of 2023.

An extra advantage that the propagation is much better on the higher bands.

We will keep you informed of the status via our website, Twitter and Facebook.

Regards,

On behalf of the Swains team,

Ronald Stuy, PA3EWP Talmaweg 138 2992AK Barendrecht The Netherlands

Email: rstuy1@chello.nl Skype: PA3EWP

Latest DXpedition News Bouvet Island 3Y0J

3Y0J DXpedition to Bouvet Island - Press Release #8



Press Release #8 from 3Y0J team - 08 February 2022

3Y0J DXpedition to Bouvet Island, January 2023



Since we signed the contract with Marama we have been working on fine tuning the dates and port of departure. Today we can confirm that the departure date for the 3Y0J DXpedition will be **January 6th 2023**. It is complex to plan the logistics of such a huge project like the 3Y0J Bouvet DXpedition which involves many parties. The new dates are mainly related to the Marama vessel logistics, but as well the new dates enable us to return to Cape Town in late February 2023. We can confirm the scheduled duration of the DXpedition is 44 days and that we have reserved a week additional contingency at the end giving us more flexibility. We have contracted 22 days at Bouvet Island, and it means we will spend more than 3 weeks at Bouvet. As we have the flexibility to still decide the port of departure Ushuaia or Port Stanley this will be done at a later stage.

It is with great pleasure we inform that we have completed all equipment selection for this trip. For the station setup we will lineup 12 stations, that will include 8 human mode CW/SSB stations and 4 FT8 stations so to achieve our new goal of 200,000 QSOs. We will be using the Elecraft K3S, a well proven in the field DXpedition radio as the CW/SSB radio and SunSDR2 DX as the FT8 radio.

During peak time we will run up to 12 radios simultaneously by using 4O3A triplexers and InnovAntenna/Wimo tribanders together with Messi&Paoloni coax. We plan for minimum downtime on the radios, and to achieve this we will setup the 4 FT8 stations to run 24/7 so that these can either be run by one operator separately or be run by any other operator in a simplified SO2R setup. This will be done so that each operator can log into the FT8 machine from his operator position and run CW/SSB and FT8 simultaneously. Running several radios by a single operator this way has shown to be very efficient.

At Bouvet we are pleased to announce that we will use the well-known **S.P.E. EXPERT** amplifier. We will bring with us various models where the 1.5K-FA will be the main model, but for 160m we will be using a 2.0 kW amplifier and a vertical running a K3S with diversity RX. We will also have several spare amplifiers.

We are also pleased to inform that as the RX antenna system we will be using a ground independent RX loop system developed by **LZ1AQ**. This RX antenna will be located 250 meters away from the camp and will provide us with a RX antenna for 160-30m with 8xRX output signals. It also includes possibility to switch from loop to dipole mode.

We have procured **5 rugged YANMAR** diesel generators to provide the station supply that will also include 1 spare generator.

Going to Bouvet is a huge undertaking financially and it would simply not be possible without the support from the vendors and our sponsors **Expert Electronics**, **S.P.E.**, **403A**, **Messi&Paoloni and LZ1AQ**. If you want to have the opportunity to work the rare #2 DXCC Bouvet island, please consider supporting us by donating upfront.

You can follow our plans from our website and the 3Y0J Facebook pages:

http://www.3v0j.no

https://www.facebook.com/groups/3093983840726129

Club Log DX Report

Band	QSOs	% DX	Graph
160M	19,422	43.44	
80M	83,039	37.51	
60M	14,396	29.27	
40M	231,054	49.91	
30M	59,283	43.05	
20M	270,273	68.01	
17M	70,207	61.59	
15M	238,760	79.92	
12M	66,242	73.03	
10M	99,789	71.38	
6M	2,776	41.93	I
4M	73	0.00	1
2M	4,044	6.82	I

Mode	% Use	QSOs	Graph
FT8	47.65	554,784	
cw	41.22	479,914	
SSB	6.00	69,823	
FT4	3.68	42,870	
PSK	1.05	12,265	
FM	0.15	1,795	
MFSK	0.11	1,308	
RTTY	0.05	575	
DIGITALVOICE	0.03	316	
AM	0.01	113	
MSK144	0.01	73	
SSTV	0.01	73	
JT65	0.00	58	
DSTAR	0.00	55	I
All other	0.03	304	

Rank	Prefix	Entity Name		
1.	P5	DPRK (NORTH KOREA)		
2.	3Y/B	BOUVET ISLAND		
3.	FT5/VV	CROZET ISLAND		
4.	вѕ7Н	SCARBOROUGH REEF		
5.	CE0X	SAN FELIX ISLANDS		
6.	BV9P	PRATAS ISLAND		
7.	KH7K	KURE ISLAND		
8.	KH3	JOHNSTON ISLAND		
9.	3Y/P	PETER 1 ISLAND		
10.	FT5/X	KERGUELEN ISLAND		
11.	FT/G	GLORIOSO ISLAND		
12.	VKOM	MACQUARIE ISLAND		
13.	YV0	AVES ISLAND		
14.	KH4	MIDWAY ISLAND		
15.	ZS8	PRINCE EDWARD & MARION ISLANDS		
16.	PY08	SAINT PETER AND PAUL ROCKS		
17.	PY0T	TRINDADE & MARTIM VAZ ISLANDS		
18.	KP5	DESECHEO ISLAND		
19.	VP8S	SOUTH SANDWICH ISLANDS		
20.	KH5	PALMYRA & JARVIS ISLANDS		



This report is sent to the <u>Club Log Google Group</u> every 7 days. It's also available daily at 14:30Z from https://clublog.org/dxreport.html

It contains a summary of band conditions and activity, based on the data that you and other Club Log users have uploaded. If you have any suggestions or feedback on this report, please email Michael G7VJR at michael@g7vjr.org







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NEW

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See: DX World Guide

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