

EUROPEAN DX FOUNDATION E.V.

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Newsletter 2 • 2024

60th Anniversary of the Alfred Faure Station creation



FT8WW
2023

FB8WW
1963

Alfred Faure Station, Possession Island, CROZET District



TUVALU 

WAZ 31 • ITU 65 • Loc RI91

T2C



German DXpedition 2023




Dem. Republic of Congo




Vlad

9Q2WX

CQ ZONE 36 • ITU ZONE 52



 Micronesia

V62P

Puluwat Is. OC-155



 Micronesia

V62S

Satawal Is. OC-299

EUDXF NEWSLETTER 2 • 2024

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**change
of address**

I would like to remind you that members who change their address or e-mail address inform our treasurer at

eudxf@eudxf.eu



Imprint

EUropean DX Foundation e.V. — **President:** Gerben A. Menting (PG5M) Leemdobbe 19, 9472 ZR Zuidlaren, The Netherlands, e-mail: president@eudxf.eu. **Boardmembers:** Ronald Stuy (PA3EWP), Prof. Dr. Achim Rogmann (DF3EC), Hans P. Blondeel Timmerman (PB2T), Istvan "Pista" Gaspar (HA5AO). **Advisor:** Jan B. C. Harders (DJ8NK), Dominik Weiel (DL5EBE).

Officemanager: Alex van Hengel, (PA1AW). **Cashier/Office DL/ Printing Support:** Robert F. Lörcks (DL1EBV), **Webmaster:** Alex van Hengel (PA1AW).

The annual **membership fee** is **25 Euro**. Please pay the amount to our **Bank Account:** Volksbank Kleverland, **IBAN:** DE65 3246 0422 0205 1830 19 **BIC:** GENO DE D1KL L.

I trust that members living in the Euro zone will use this account only, because this implies the least costs for our foundation. Those who do not live in the Euro zone may also use PayPal to cashier@eudxf.eu.

Welcoming Words of the President

This second 2024 edition of our newsletter will cover the extensive reports of four DXpeditions, i.e. FT8WW Crozet Island, T2C Tuvalu, 9Q2WX DR Congo and the V62P & V62S from Micronesia. Interesting stories and it gives you a great view of what it takes to organize and execute such DXpeditions. You will read that planning is crucial but once on the

spot, circumstances can be different from what you expect, or pre-arrangements were not fully executed and the DXpedition team must improvise. The team members must use their experience, skills, knowledge and sometimes a kind of politics to overcome problems. Also, climate conditions and damaged or failing equipment can be

part of the game. You will find some of these elements in the DXpedition reports. Enjoy reading!

We are still evaluating the feedback that we received from the members. We need to make our selection of what is most important or requested, and what we can execute. This is still work in progress.



Hans-Martin Kurka DK2HM offered once again to organize the EUDXF dinner at Ham Radio Friedrichshafen. We have again confirmation for the Friday night reservation at Restaurant Heuschober to also have this year a wonderful EUDXF dinner together.

Heuschober is located directly next to Messe Friedrichshafen, only a short walk from the parking space.

Same as last year, there are 30 places available with "first come first serve". If you also want to join, please e-mail dk2hm@gmx.de or via WhatsApp. Registration includes a 10 Euro deposit per person via PayPal to dk2hm@gmx.de which will be handed back at the dinner or otherwise be donated to EUDXF.

Recently we conducted a poll called Best EUDXF sponsored DXpedition of 2023. The idea was to have the votes from our EUDXF members and the mail was only sent to our members. However, we did not explicitly mention that it was for EUDXF members only. At the end of the voting period, we had 292 votes, more than members we have. I also noticed that on one specific day we had an unusual rapid increase in votes. Because of the above, we will conduct a new poll, where we must make sure we get only votes from our EUDXF members. We are working on that.

Regards, Gerben



FT8WW - An amateur radio in the middle of nowhere!

BY THIERRY MAZEL, F6CUK - TRANSLATION, PASCAL TASSINARI, F8TRT, PAUL GRANGER, F6EXV

Saturday December 10, 2022: the adventure begins!

It was on Saturday December 10, early in the morning, that Myriam, my wife, drove me to Bordeaux airport. This was the start of the adventure. Previously, for almost two years, we had prepared

this project, with a small group of dedicated friends. I cannot summarize it here, an entire book would not suffice. After a flight of over an hour, here I am in Paris Charles de Gaulle for the connection to

Reunion Island. The 10 hours sitting in the plane was going to be a long time! Luckily, without traveling first class, I was able to get an intermediate class ticket and my long legs didn't suffer too much.



Sunday, December 11, my friend Phil FR8UA was waiting for me at the exit of Roland Garros airport in Saint-Denis. We had never met before, but with his wife Anne FR8TZ, I had the best reception. In

these moments, the OM spirit takes on its full meaning. These first hours on the island are unforgettable. I spent my first day and a half on Reunion Island with them. On Monday 12 around 1:30 p.m.,

a short photo session on the harbour of Le Port was improvised in front of the *Marion Dufresne*, the boat from the French Southern and Antarctic Lands (TAAF).



The *Marion Dufresne* rotates four times a year between the three sub-Antarctic archipelagos, namely Crozet, Kerguelen, Saint-Paul and Amsterdam. For this rotation, a small additional trip north to serve Tromelin Island had to be made.

It was boarding time with a lot of

young faces. All scientists (VSC: Volunteer for civil service) who left like me for one of the four territories served. However, there were also a few older faces, representatives of the French Southern and Antarctic Lands or scientists on mission from the French Polar Institute

(IPEV). Around 4 p.m., with the holds full and the passengers on board, the boat lifted the mooring lines and slowly left the port. Here we go, no return possible for four months.



The journey begins.

Monday, December 13: the first stopover, Tromelin Island.

First destination was Tromelin Island, to the north. There, we did the rotation of the four people who had been on this islet for three months. We arrived there on Monday 13 around 2 pm. Then, the first rotations of the helicopter began. In addition to the staff, you had to carry water, a lot of water, because there is none on the island, food, equipment

...After a calm night, the rotations resumed early in the morning. I was lucky to be able to be part of one of the first helicopter rotations and therefore be able to spend the day on the island.

Tromelin is a small oval plateau, covered with more or less crushed coral debris. In the center and along its entire length sits an old airstrip with, in one

corner, a few buildings and small veloutiers everywhere covered with nests and birds. Next to the buildings, a few coconut trees were planted in the past to provide some shade. Two-thirds of the way around the island, there is a beach, undermined by the holes that turtles had dug to lay their eggs. They come at night, unfortunately I couldn't see this show.



On Tromelin, it is hot, very hot. Sunscreen is essential, several times a day. You must drink and be careful of heatstroke. The reverberation due to the white color of the crushed coral also contributes greatly to the increase in temperature.

Here, as in all the territories managed by the French Southern and Antarctic Lands, the protection of fauna and flora is at the heart of activities. Scientists, maintenance staff, everyone measures, evaluates and works to preserve this

heritage. Everything is organized to leave as little human footprint as possible on these territories.

While the helicopter continued its rotations, we could go around the island with a scientist as a guide. What most impressed the layman that I am was the almost total absence of fear of the birds in our presence. It had been so long since man had killed or abused the birds that they have become accustomed to our presence. They remained relatively calm as we passed by. We were able to get

answers to the thousand questions we asked by following our guide. Then we went to see the rest of the anchor of the frigate l'Utile which, on August 1, 1761, was shipwrecked leaving 80 black slaves abandoned on this islet for 15 years. We evoke here the historical and dramatic side of Tromelin.

Tuesday, December 14: on the way to the Crozet archipelago.

At the end of the afternoon, we returned to the boat. Back to Reunion, we stayed offshore and it was after two heli-

copter rotations to drop off the staff that had stayed on Tromelin that we headed south towards the Crozet archipelago,

our second destination which was to be the final one for me.



Throughout our voyage, which lasted four days, the sea was calm and I was not too sick. As we were going south, we could see a few dolphins the first day, then the first albatrosses. After the

third day, the water changed color and the temperature dropped. On deck, the t-shirt had given way to long-sleeved waterproof clothing. The wind was getting stronger.

Saturday 19, I saw the first cliffs of Crozet. Everyone was on deck. Cameras and video cameras captured the moment.

Sunday, December 20: landing of men and equipment.

Sunday was devoted to the comings and goings of the helicopter. We had to disembark the four people who arrived, including myself, embark the seventeen who left and, as on Tromelin, unload

food, materials, canteens and everything necessary to allow our small community to live independently for more than three months. Later, I will locate the building containing the cold rooms where

the stock of food is stored which will allow us to be independent between two rotations of the *Marion Dufresne*.



So I discovered the base, its buildings, its lifestyle and my future companions. This was the moment when I realized the accomplishment of several months of work, of exchanges with the French Southern and Antarctic Lands, the advice of the "elders"... How many other

amateur radios before me had hoped one day to be in my place? I fulfilled the dream of many. It was a bit of a magical moment.

There were two main categories of personnel on the mission: INFRA personnel (base infrastructure) who manage the

base and who depend on the French Southern and Antarctic Lands. Then there are the scientific staffs who work for laboratories, mainly the French Polar Institute. This whole small community currently represented thirty-four people.

Quickly, I found the room assigned to me to install the station. I also found the three canteens almost in the state they were in when they left my house. Here again, I must underline the remark-

able work of the logistics teams of the French Southern and Antarctic Lands. You should know that the canteens had to leave my house in August so that they arrived at the *Marion Dufresne* rotation

preceding my arrival, thus ensuring that they were there when I arrived. After a transit in Fos-sur-Mer and Reunion Island, they were there without being damaged: it was a relief.



The agents of the French Southern and Antarctic Lands as well as the INFRA personnel on the base welcomed me with great care, and many of the concerns I had when I arrived disappeared as

everyone was considerate. Very quickly, a concrete base where to install the antenna supports was found. From December 23, a team drilled, welded and bolted the two supports. The first was for

the Spiderbeam mast, the second for the QO-100 dish.

On the night of December 25th, I started my first broadcasts.

Highlight on the equipment used.

The antennas were as follows. Spiderbeam provided me with an 18 meter mast. I only took the first elements out so that it was 8 meters high. The last (smallest) element was doubled, i.e. in

fact the last element output included the next element, not deployed. So there were two tubes 8 meters high. I installed three layers of guy wires in four directions: one at the top, then one

1.5 meters below and the last again 1.5 meters below. The guy wires were provided to me by Mastrant. These are 3 mm diameter cables, capable of withstanding a load of 180 kg.



At the top of the mast there were two pulleys. The first allows you to raise and lower a Levy type antenna (two times 10 meters). A 600 ohm feed line provided by F6KOP fed a balun I made with two toroid's. Next came a matchbox supplied

by MFJ, model 998 RT. Finally, a 7 mm diameter coax supplied by Messi and Paoloni connected the system to the station.

This antenna allowed me to cover the frequencies of 7, 10 and 14 MHz.

A second pulley allowed me to mount either a vertical or a vertical dipole for the high bands: 18, 21, 24 and 28 MHz.

Here too, we fed either with a balun for the vertical dipole, or directly for the vertical on a second MFJ 998RT box.

Note that the second balun was in my opinion undersized. It was my mistake not to have sufficiently verified. I bought

it in Friedrichshafen. This limited the output power to 250 W and caused many hassle. It forced me to abandon the

vertical dipole for a simple vertical, thereby removing the balun.



A second antenna system was mounted with the QO-100 dish. Nearby sited the box made by Lucien F1TE and offered by the REF. It allowed me to do SSB broadcasts and satellite videos. The most difficult thing was to point the

dish to the satellite, in the wind, often in the rain and with temperatures of 5 or 6 degrees. It was sporty! After two days of testing, the satellite dish was set. Thank you, Lucien, for your help.

The HF station was made up of two

TS590S transceivers, two ACOM 1010 amplifiers, one of which was on loan from the Clipperton DX club. The rest of the equipment was duplicated (microphone, Heil helmet, PC, CAT ...).

Supervised traffic conditions.

The first QSO was made on the night of December 25th in FT8, on 30 m, with Pascal F8TRT, our webmaster. From the start, the traffic was tough and the pile-ups impressive. The agreement signed

with the French Southern and Antarctic Lands indicated the conditions that the French Polar Institute imposed, namely three weeks of operation between the day of my arrival and January 27th. A daily

shut down was scheduled for a period of 5 hours, depending on whether the personnel of the French Polar Institute had to carry out a physical measurement.-



223411	Tx	1000	~	CQ	F8TRT	JN33	
223415	-16	0.1	176	~	F8TRT	FT8WW	LE53
223430	Tx	1000	~	FT8WW	F8TRT	-16	
223500	Tx	1000	~	FT8WW	F8TRT	-16	
223515	-15	0.1	176	~	F8TRT	FT8WW	R-13 a2
223530	Tx	1000	~	FT8WW	F8TRT	RR73	
223545	-16	0.1	176	~	F8TRT	FT8WW	RR73
223605	Tx	1000	~	FT8WW	F8TRT	73	
223630	Tx	1000	~	73	MERCI		
223915	-18	0.1	320	~	JH4NYG	FT8WW	+05
223945	-17	0.1	320	~	JH4NYG	FT8WW	RR73
224045	-12	0.1	319	~	JH7WNV	FT8WW	RR73
224115	-14	0.1	319	~	PY5HOT	FT8WW	+11
224130	-11	0.4	317	~	FT8WW	PY5HOT	R-10
224145	-16	0.1	318	~	PY5HOT	FT8WW	RR73
224245	-18	0.1	318	~	JA2PTQ	FT8WW	RR73
224345	-19	0.1	317	~	JR5JAQ	FT8WW	R+20
224445	-14	0.1	316	~	JR5JAQ	FT8WW	R+20
224515	-14	0.1	316	~	JR5JAQ	FT8WW	R+20
224615	-14	0.1	315	~	OZ8ABE	FT8WW	RR73
224815	-18	0.1	314	~	JA5EXW	FT8WW	RR73
224945	-11	0.3	314	~	CQ	FT8WW	LE53 Crozet Is.
225045	-20	0.1	313	~	DL1RWN	FT8WW	-06

At the end of these three weeks, and after agreement from the French Polar Institute, an amendment could be signed to the agreement to allow me to continue my broadcasts.

I started on 30 meters at night in FT8. During the day, depending on the propagation, I was on 20 meters.

Quickly, in the mornings, I switched

to CW instead of FT8 in order to contact the American west coast. Then again, I was in CW, always on 20 meters in the afternoons, with Asia then with Europe. One afternoon, I tried the vertical dipole on 17 meters, but the balun showed its limits and I modified the antenna to adapt it to 15 meters. Also, after a few days, my activity boiled down to

30 meters for part of the nights, then 20 meters CW in the mornings and 15 meters in the afternoons until the end of propagation and back to 30 meters. Note that around 5 p.m. local time (1 p.m. TU) the noise level was becoming high over 15 meters, which contributed to the difficulty of CW operation and therefore forced me to return to FT8.



I rested during downtime for the measurement. The break was often longer than the five hours imposed. It was a trying time with few hours of sleep. CW operation was difficult because of the level of the signals which were not always very strong and the size of the pile-up, 20 or even 30 kHz wide. Copying a call was difficult: indiscipline especially with Europe did not make it easy. On average, I contacted three stations every two minutes, often four. In order to promote ATNOs as much as possible, I limited myself to these three bands and only to FT8 and CW modes. After two consecu-

tive hours of CW operation, I was feeling tired. I often took a little rest with a cup of tea and came back to FT8.

During these first twenty-one days of activity, I made about 21,000 QSOs. On three occasions, I had to lower the antennas because of the wind for fear that they would give way, which reduced my activity time but also allowed me to rest. In a 24-hour day, I worked around 17 to 18 hours, depending on how tired I was.

We must mention the weather conditions on Crozet. Beside the fact that I left during the "summer" and some days are

pleasant with little wind and temperatures of around 10°, most of the time the wind is strong, with peaks at 100 km/h. The record during my stay was 134 km/h. It rains often, we are frequently in the clouds and the humidity is penetrating, even if the temperatures remain positive. With the wind the feeling is quite different. Working outside during these times is difficult. Installing and maintaining antennas is always a real challenge.

On January 16th in the morning, I had to stop my transmissions.

Living conditions on the base.

A community of thirty-four people is almost a family. Everyone pays attention to each other. Common life tasks are carried out in turn according to a schedule written by the DISCRO (head of the Crozet district, representative of the prefect, senior administrator on the

Alfred-Faure base). Everyone participates, and in the event of a planning problem, exchanges between us are common. We have two cooks who during the stay will do wonders for our meals. Our Christmas Eve and New Year's Eve had nothing to envy to those our

families have in mainland France. Every day we had fresh bread, baked overnight, as the chef was doing his sourdough. As far as frozen products allowed, the diet was varied and balanced, even for vegetarians. Nothing was missing.



I had my birthday during this period and the cakes, the candles, the party, are unforgettable memories. We sure were

isolated, but never alone.

I cannot speak about the talents of the mechanics, the doctor, all the

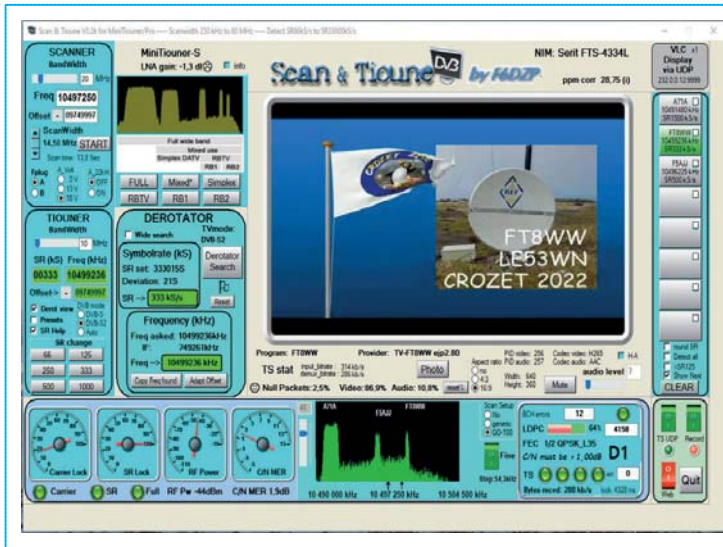
personnel at the base, but they were all experienced professionals in their field and I felt safe with each of them.

Sunday January 15: end of operation.

So, on the evening of Sunday the 15th, I had to stop my broadcasts. There began a difficult period: waiting. So I was spending my days reading, accompanying scientists in their work, filming and

taking pictures. I also used the QO-100 satellite through which I transmitted my pictures and videos, for the educational needs of the schools with which I would have contacts in the following days. The

days were long, however. I was in one of the most sought-after lands and I had to wait without having control of the clock. Frustration was high, but I knew that before I left.



Projet Contact École avec Crozet



It was during this period that I had the chance to participate with Jeanne in the counting and eventually in the fitting of albatross rings. This was the most memorable moment of my stay. These clumsy birds on land are masters in the air. Not aggressive, we could easily check if they were ringed. For this, Jeanne has a well-

established technique.

Then there were the visits to the manchotièrre. Seeing, hearing the tens of thousands of penguins brooding, coming and going in this forest of birds, vigorously defending their little corner, all this transported me to another world. Scientists showed me, explained to me,

answered my questions and made me discover this new world. The pictures and videos will be there to image my words. I didn't have time to go everywhere on the island and discover all its facets, but what I could see around the base already fascinated me..



This period of inactivity was necessary for the French Polar Institute so that the people in charge of terrestrial magnetism measurements could analyze my logbook and check whether or not I disturbed their work. After two weeks, we had the answer: the activity on 10 MHz was seen by the measurements. The

French Polar Institute gave its agreement to the French Southern and Antarctic Lands to extend my authorization under several conditions, including the prohibition of operation on 10 MHz. In addition, this authorization was only valid for three weeks, the fourth I had to stop my transmissions so that the French Polar Institute

could check the measurements again. In case I did not interfere, I could resume the broadcasts. But I still had to stop 10 days before Marion Dufresne's departure from La Réunion, around March 15. It is necessary to underline the work that the services of the French Polar Institute had to provide quickly to analyze the logs.

Once the mail from the French Polar Institute was received, the French Southern and Antarctic Lands had to make a new contract to allow me to resume operation. In about ten days, the document signed by the Prefect, senior administrator, was in the mailbox of

the base manager. Once signed, I could resume operation. Thank you to the French Southern and Antarctic Lands for producing this document so quickly. The four weeks of inactivity sparked a lot of comments in the amateur world. From the start, the agreement that I signed

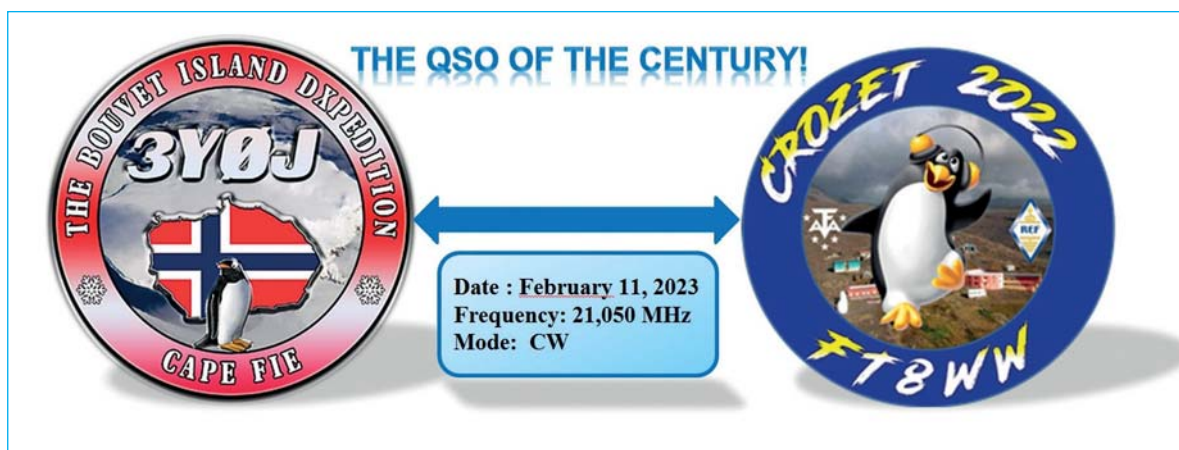
with the French Southern and Antarctic Lands clearly specified all these stages. I was therefore not surprised and could only be satisfied that my authorization was extended.

Monday 30 January: radio operation resumes.

So, four weeks after this interruption, the show resumed. I took advantage of this period of inactivity to change the

vertical dipole into a simple vertical wire connected directly to the MFJ matchbox. So I removed the balun which definitely

overheated. This antenna allowed me to cover 28 and 24 MHz without SWR.



The schedule changed a little. I started on 24 and 28 MHz. I also started SSB on 28. The propagation was better. My signal however was not very strong since I only had wire antennas. At the request of the US, I also started SSB on 20 meters in the mornings. But the SSB was still a concern, because of the not very efficient antennas and the not always very good propagation. An hour was devoted to the CW every day, often more. My signal had to be strong enough to be received by my correspondents. There rarely were problems with Asian stations (mainly Japan) but it was more difficult with Europe and almost impossible with the US which was impacted by the prohibition of operation on 10 MHz. In the mornings, the 20 meters was open with the west coast, but I had trouble getting heard in the North American QRM. Sometimes, the 18 meters also opened up a bit with the US, I tried to take advantage of it. In any case, the restrictions due to abso-

lute measurement limited my operating time and I often had to shut down in the middle of good openings. I discovered another difficulty in contacting Europe and the US: the wall of Japanese stations. The Japanese stations are so numerous with signals much stronger than the rest of the planet that they form a real wall prohibiting any contact other than Asia.

The log was filling up, until Sunday, March 5. I then exceeded 48,000 QSOs. There I had to stop my emissions again. Throughout this last weekend, we were experiencing general power cuts due to a breakdown in the power plant. Operating was much disrupted. The cause of the outage was found on the morning of Monday, March 6. In order to make sure that the equipment had not suffered too much damage, I made a few QSOs on Monday and then I shut down the station.

The weather had changed over the past few days. There was still wind and

rain, but the temperatures dropped and if it was not very cold, with the wind, the feeling was much cooler. Warm coats came out. The wind speeds were higher; the peak was reached one night with 136 km/h. The dish which was my main concern remained in place. Nevertheless, one morning, there was no more QO-100. With the help of Lucien F1TE to diagnose the problem, I realized that there was water in the box. The winds and the incessant rains got the better of its waterproofness. I could not therefore continue my programs with the schools. Quickly, AMSAT France set up a back-up solution. They were sending me the questions, I was seeking the answers from the base staff and forwarded them to a station equipped with QO-100 in Africa or Mauritius, who did the retransmission for me. The QO-100 link was maintained, even though it was not done from the base, the children had their answers via the satellite.

Monday, March 6: new period without radio, then end of stay.

After a week without radio, I resumed for the last three days, from Monday March 13 to Wednesday March 15. There were still so many callers for FT8WW. I

was doing SSB every day on 10 meters, which seemed to me the best band for voice, considering the means at my disposal. One morning, I took advantage of

a nice opening on 20 meters with the US to be on SSB. On the evening of the 16th, FT8WW was over.

The 50,000 QSOs including QO-100 were reached. The statistics will show

that I was active the equivalent of 22 days, an average of 93 QSOs per hour. All

statistics are on the website.



Now we had to think about the return. From March 17, I tidied up, cleaned, filled the canteens and the necessary documents for the return.

Supervised traffic conditions.

In fact, the fog, the lack of visibility, the wind and the rain did disrupt the schedule which was established when the

Marion Dufresne arrived. Many vacations could not be carried out. On Wednesday, March 29, the helicopter could not take

off, which delayed the schedule but gave us an extra night on the base.



It was with a slightly rough sea that we arrived on April 2nd in the morning at the Kerguelen archipelago. The next day, I could go ashore to spend a day on the

base. We left on April 6th, heading to Amsterdam Island where we arrived on Sunday April 9 in the morning. There, just like for Kerguelen, I was able to get off the

boat for an express tour of the base and its surroundings. On Tuesday April 12 we set sail again for La Réunion where we arrived on Monday April 17 in the morning.

Thanks

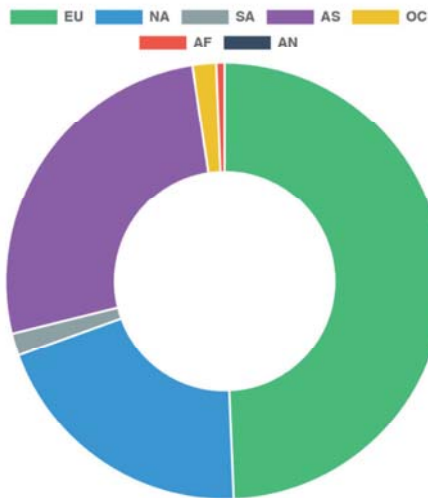
You can't set up such an important project without the help and advice of many people. I can't name everyone and I hope you will forgive me, but nevertheless it is necessary to mention:

- Mr. the Minister of the Interior and Overseas Gérald DARMANIN, for authorizing the project.
- Mrs. the Prefect Superior Administrator Florence JEANBLANC-RISLER and her predecessor Mr. the Prefect Charles GIUSTI, all the staff of the French Southern and Antarctic Lands at the headquarters on Reunion Island as well as all the staff and friends from the base.
- The French Polar Institute, which despite the risk of disruption allowed me to operate.
- The REF and the very many radio friends for their advice, help, which they provided me with.
- Equipment suppliers, their logos are on the website.
- The very many friends who, through their financial assistance, helped me bear the costs of the project.

Finally, and above all, my wife who, for two years, underwent my moods and validated my departure for five months.



Breakdown by Continent



FT8WW – DXCC by Band/Mode breakdown

Band	CW	FT8	SSB	Total
30	28	110	0	110
20	97	117	29	129
17	65	97	1	99
15	80	102	0	110
12	64	106	2	111
10	56	94	80	100
Totals	114	144	91	154

FT8WW – Band/Mode breakdown

Band	CW	FT8	SSB	Total	Total %
30	194	7,695	0	7,889	15.3 %
20	4,600	8,195	568	13,363	26.0 %
17	1,132	4,280	1	5,413	10.5 %
15	2,707	5,443	0	8,150	15.8 %
12	1,384	6,093	5	7,482	14.5 %
10	1,116	4,667	2,092	7,875	15.3 %
13	0	0	1,310	1,310	2.5 %
Totals	11,133	36,373	3,976	51,482	100.0 %



FT8WW – Continent by Mode

CONTINENT/Mode	SSB	CW	FT8	Total	Total %
AFRICA	47	59	208	314	0.6 %
ANTARTICA	1	0	2	3	0.0 %
ASIA	396	3,480	9,765	13,641	26.5 %
EUROPE	2,866	4,838	17,700	25,404	49.3 %
NORTH AMERIKA	584	2,413	7,373	10,370	20.1 %
OCEANIA	30	159	709	898	1.7 %
SOUTH AMERICA	52	184	616	852	1.7 %
Total QSO	3,976	11,133	36,373	51,482	100.0 %
Total %	7.7 %	21.6 %	70.7 %		

FT8WW – Continent by Band

CONTINENT/Band	30	20	17	15	12	10	13	Total	Total %
AFRICA	39	96	24	51	41	38	25	314	0.6 %
ANTARTICA	1	1	0	0	0	0	1	3	0.0 %
ASIA	1,558	2,744	1,349	2,993	2,449	2,510	38	13,641	26.5 %
EUROPE	2,909	4,473	3,162	4,607	4,272	4,756	1,225	25,404	49.3 %
NORTH AMERIKA	3,049	5,395	719	295	518	394	0	10,370	20.1 %
OCEANIA	79	351	110	131	102	125	0	898	1.7 %
SOUTH AMERICA	254	303	49	73	100	52	21	852	1.7 %
Total QSO	7,889	13,363	5,413	8,150	7,482	7,875	1,310	51,482	100.0 %
Total %	15.3 %	26.0 %	10.5 %	15.8 %	14.5 %	15.3 %	2.5 %	100.0 %	

**NCDXF
DXcellence
Award**

**FT8WW Crozet Island DXpedition
2023**



Awarded to Thierry Mazel, F6CUK, for the outstanding performance of a well-organized DXpedition that had a significant impact on Club Log users' totals from #3 Most Wanted entity.
And for activities involving humanitarian efforts and education.

**Second annual award
April 22, 2023**

T2C – DXpedition to Tuvalu 2023

BY WERNER HASEMANN, DJ9KH

T2C – Tuvalu 2023



From left to right: DK5WL, DL7VEE, DH5FS, DJ7TO, DL6KVA, DG2RON,
DL8LAS, DL1KWK, DL6KAC, DL7JOM, DL4SVA, DJ9KH



Welcome to Fiji



The Funafuti-atoll from above



With the successful activation of Papua New Guinea (P29RO) in mind we were considering another destination in the South Pacific. A short discussion led us to the decision for Tuvalu. Our proven team-leader DL7VEE had compelling arguments for this choice:

1. Tuvalu has a quite prominent place on the most wanted lists : # 61 world-wide
2. the sunspot situation promised us good conditions on the higher bands (pileups)
3. the logistical challenges should be controllable
3. there was no information about regular activities from there

Putting together a team was no problem, we even had a waiting-list this time.

Preparations were made a lot easier by John, KK7L, who provided very helpful information on the island, the authorities, and all things around our needs during the expedition.

With that background we applied for our T2C – license, which at least was no problem to get.

At the time, the Tuvalu-officials had no information about any other planned amateur-radio activations from Tuvalu. A few weeks later we had to hear about the planned T22T-activation just before ours: 10 stations simultaneously ...

Astonished, but not shocked we continued our preparations ... it was on us to make the best of it.

Another light-weight-expedition went on, flights and hotel were booked and off we flew. From Berlin and Frankfurt via Los Angeles to Nadi on Fiji. Here we took a domestic flight to Suva from where had a 3 hours flight to Funafuti.

The airstrip here is used 3 times a week for regular flights from and to Fiji. Between the flights the airstrip is used as a normal street, as playground.

Our hotel was just across the road, no taxi or bus required. Some discussions with the hotel management were necessary to explain the special wishes for our activities. The very sympathetic staff did their best to fulfil all our wishes: 4 bungalows in one row with some space in-between for the antennas. Not exactly what we had planned before, but the best they could offer us.

Our plan was to set up the antennas close to the beach and far away from the electric infrastructure of the hotel. The actual situation presented us with unforeseen problems: we had no access to the beach; big machines were crossing the area which we intended to use for antennas and feed lines and there were

hundreds of LEDs around the shack-bungalow.

The restricted area available for antennas resulted in small distances between our antennas and the hotel infrastructure. Man-made noise from the hotel and coupling between the antennas was challenging but most times controllable. The proven double filtering system in the shack helped us to keep out most of the noise. Changing the bands or modes was another method to keep 5 stations working with not too much problems.

As announced, we had 4 to 5 stations simultaneously active 24 hours each day and were using K3s transceivers with 500-watt amplifiers and bandpass-filters connected in a local network system. Internet-connection was stable, so communication with the Club-log-system (log update) and the rest of the world was never a problem. As we all know, updating the log is essential to prevent dupes. But we also know that some individuals need at least 3 QSOs to be satisfied.

Our 'antenna-park': The 2-element-LZ-beam together with the Pentaplexer was again our work-horse for 20/17/15/12 and 10Vmeters: 1 antenna, 1 cable, 5 bands.





... another view on the antennas



... antenna works

On 160 / 80 / 60 / 40 and 30 m we were using vertical-antennas with single-radials. On 6 meters we used a simple loop-antenna. Around 80 m mast-material was used and had to be transported. All antennas were tried and tested in expeditions before, so almost no alignment work was necessary and this

enabled us to have the first QSO with VK4XY, 4 hours later.

From earlier expeditions into the South Pacific, we knew that the ionospheric and the atmospheric situation on a place like this near the equator would be challenging on the lower bands.

To improve our receiving situation,

we laid out two BOG-antennas to the favourite directions. That helped us significantly to meet the demand on 30 to 160 meters. Unfortunately, we had to remove the BOGs every morning before the big machines began their work in the neighbourhood.



All stations in action, in the foreground the 6 m-beacon station



... another view on the antennas

Nevertheless, after 3 weeks we ended up with almost 20,000 QSOs on those bands.

We expected much on 10 to 20 meters and were not disappointed. Huge pileups in CW and SSB, the operators had to give all, most times well after midnight with temperatures around 30°C and 100% humidity.

6 meters: Fortunately, the shifts lasted only 4,5 hours there was time enough to recreate and to learn about the people, the culture, and the problems of Tuvalu.

Some facts about Tuvalu:

The republic of Tuvalu, formerly a part of the British Gilbert and Ellice Islands colony (VR8) is situated just halfway between Hawaii and New Zealand. Since its independence in 1978 Tuvalu is a constitutional monarchy and a member of the Commonwealth of Nations with King Charles III as the king of this second smallest nation worldwide.

As their 9-star-flag shows, Tuvalu is composed of six atolls and 3 islands which earlier belonged to the Ellice group. The Republic of Kiribati consists of the former Gilbert group.

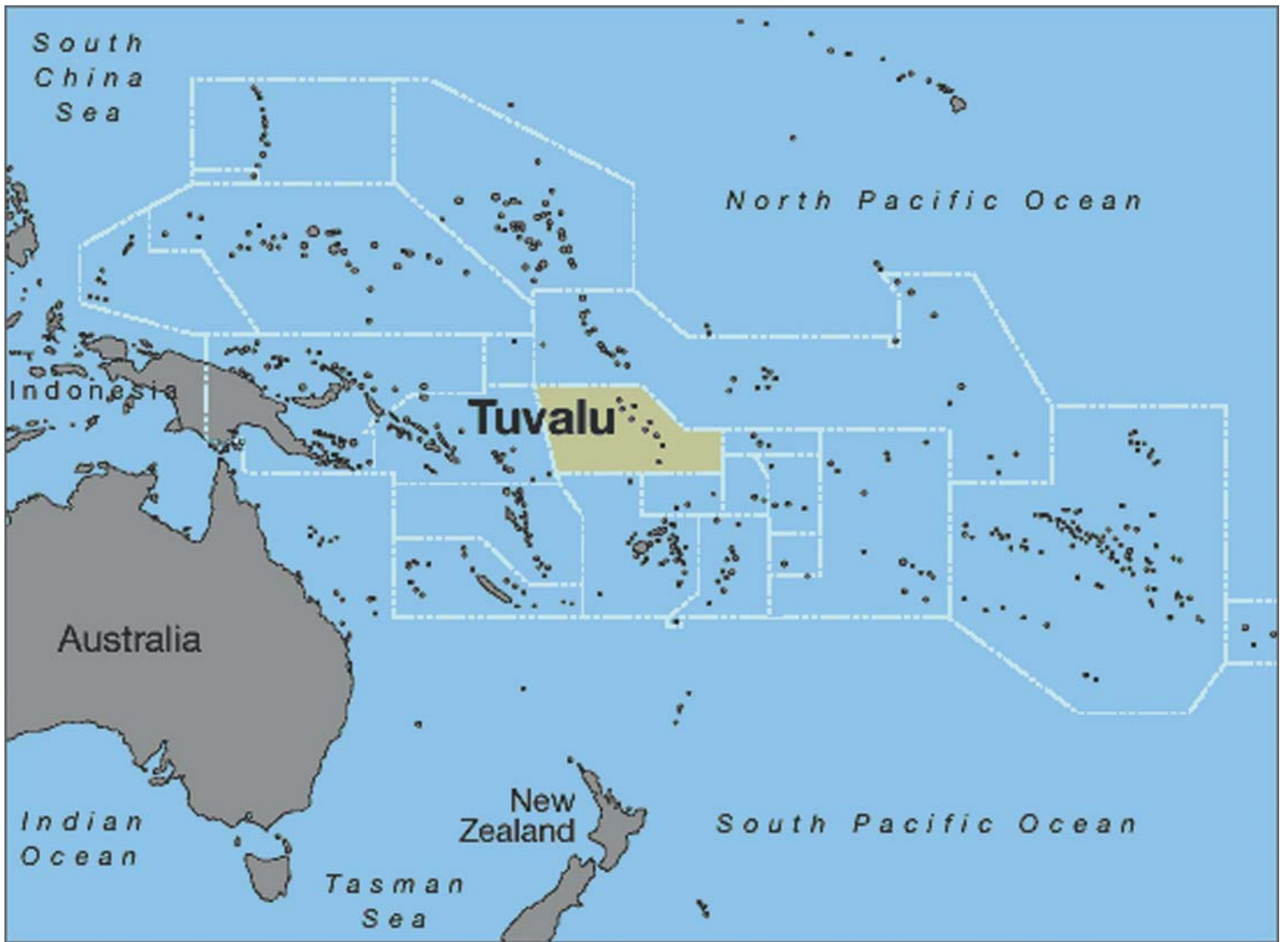
50% of the population is living on the Funafuti-atoll with the capital city, the only runway, and the government buildings. We also find the hospital, two primary-schools and the only secondary-school on Funafuti.



Motorbikes are popular vehicles, we found not more



than 20 lorries or passenger cars on Funafuti



With its 26 km² low-lying land-area Tuvalu is active in the Alliance of Small Island States which represents their interests in climate change negotiations.

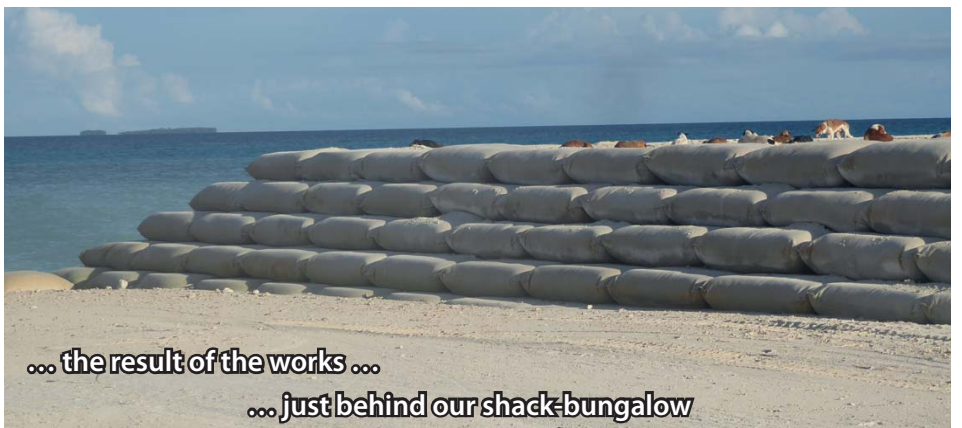
The main consequences of the climate-change are the periods of drought, heavy storms, marine flooding causing damages to the coastal environment and drinking/waste-water infrastructure.

In 2017, a 40-million-dollar project (Tuvalu Coastal Adaption Project) was started to strengthen the resilience of the Funafuti communities, that means to adapt them to the climate change. First and foremost, this entails the stabilisation of the coastline, and the filling of borrow-pits and the low-lying area around the centre of the capital. The pits were caused by the US Marine Corps in World War II. They used the material to build an airstrip. The result of this were long-lasting and serious damages to the ecosystem and the health of the Tuvaluans.

The first week of our activities was very promising with 10,000 QSOs per day, with the focus on SSB and CW. Good signals from almost all directions on the higher bands presented us with huge pile-ups.

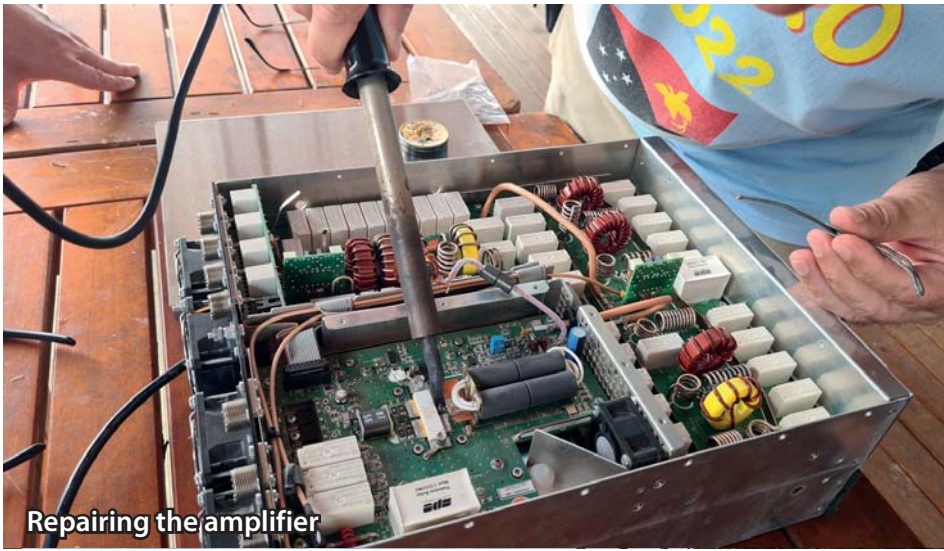


Heavy machines in action, ...



... the result of the works ...

... just behind our shack-bungalow



Repairing the amplifier



Our BOGs for the low-bands

During the second week activities slowed down, especially during daylight-time when Europe was absent. The pile-ups to Europe started in the afternoons and were the daily highlights.

As mentioned earlier, working on the low-bands was challenging and needed patience under the local QRM-situation, which we were able to improve by using the BOGs.

Two of our power-amplifiers blew up in the second week, one after the other. We were able to repair.

One of them by re-soldering the transistors. Until the end of the expedition we used it with reduced power on the low bands.

Despite this handicap we managed to work 553 stations on 160 m and 1666 stations on 80 m. We surprised the community with our activities on 60 m: 765 new bands points for stations worldwide were the result.

What about 6 meters?

One of our K3s and a simple loop-antenna were used as a beacon-station on 6 meters as well as a FT8-station. Conditions on that band were quite astonishing: we worked 219 JA's, 8 South Americans, 17 Oceanian and 9 European stations.

Radio Tuvalu 621 kHz

One day Christian DL6KAC and Fred DH5FS were invited to be guests on Radio Tuvalu. They took the opportunity to inform about amateur radio in general and the goals of our expedition in particular. Our interview-partners were keen to know, why tens of thousands of hams worldwide have so much interest in having a contact with a station in Tuvalu.

Radio Tuvalu is transmitting on 621 kHz and 100,1 MHz since 2011 and is servicing all 9 islands of the widespread island group of Tuvalu. The transmission and studio equipment were sponsored by Japan.



Our 6m-loop and the 30m antenna



Radio Tuvalu 621 kHz



Visiting the local primary-school

Beside our activities as T2C we were looking for chances to support a humanitarian project in Tuvalu. Insiders told us, the Nauti Primary School in Funafuti would be a good choice. We visited the school two times and had a very interesting and informative conversation with the headmistress,

Mrs. Palelei M. Tovia. She gave us an overview of the school-system, their problems, and their hopes for the future.

The Nauti Primary School with more than 500 pupils from 1st to 4th grade is a bilingual public school. The personnel situation appears to be quite good; the financial base however is critical in some aspects.

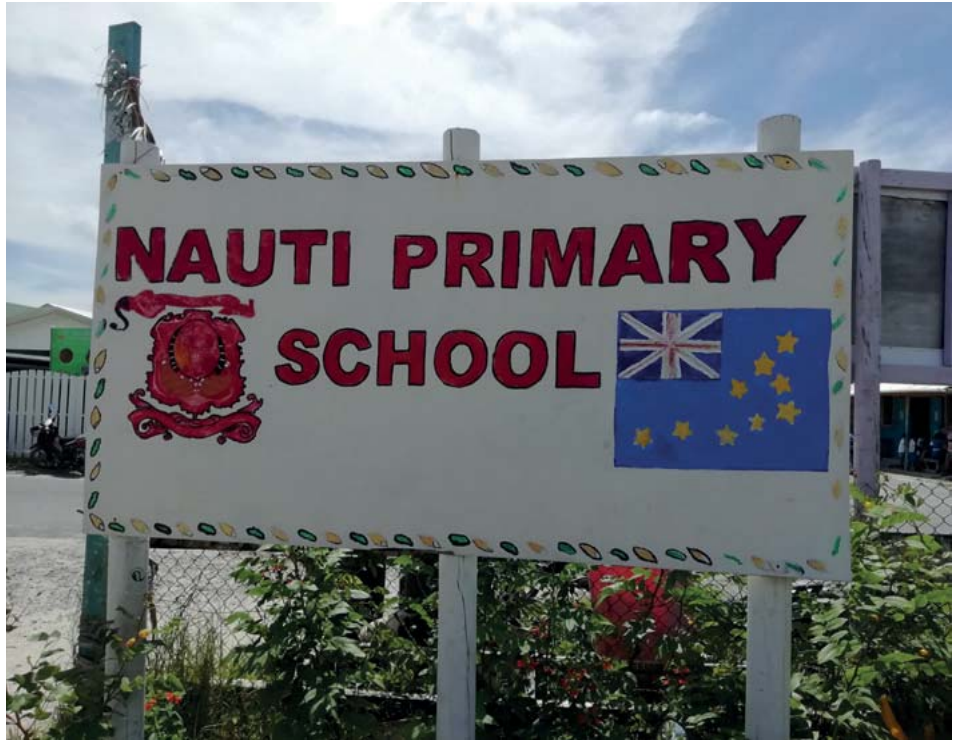
Being asked where we could help, which projects could be supported, she mentioned her plan to improve the water treatment system for the schoolchildren and raising the social support funds for disabled children. We were happy to agree to her plans and handed over our 500 AU\$ present.

After that we were invited to visit the special class for disabled children who presented us some songs in English as well as their native language. A very impressive morning for all of us.

Statistical facts:

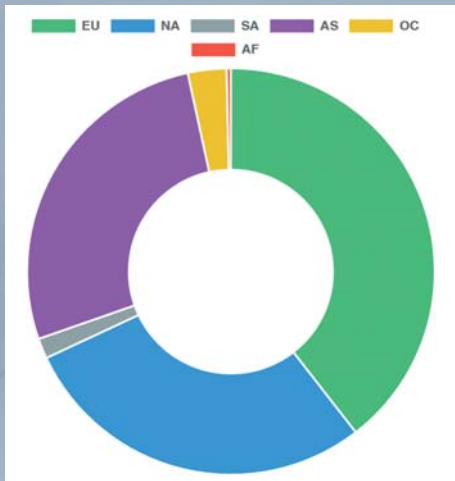
The T2C – team operated two weeks with 12 OMs and the last week with 6 OMs. After eliminating the dupes, we had 112,914 QSOs in the log, a new record for a T2-expedition.

Thanks to mostly excellent conditions on the higher bands we had almost 40 % European contacts, 30 % into Asia and 30 % into North America.



DL7VEE, Mrs. Tovia, DJ9KH

Breakdown by Continent



T2C – DXCC by Band/Mode breakdown

Band	CW	FT8	SSB	RTTY	Total
160	5	17	0	0	17
80	20	45	0	0	48
60	0	62	0	0	62
40	77	83	61	14	101
30	82	110	0	45	115
20	112	120	125	54	152
17	108	113	90	60	129
15	115	116	119	59	146
12	106	114	81	27	130
10	107	106	97	38	139
6	0	15	0	0	15
Totals	134	149	143	75	181

T2C – Band/Mode breakdown

Band	CW	FT8	SSB	RTTY	Total	Total %
160	41	512	0	0	553	0.5 %
80	276	1,390	0	0	1,666	1.5 %
60	0	765	0	0	765	0.7 %
40	2,651	3,243	1,030	164	7,088	6.3 %
30	3,364	5,960	0	467	9,791	8.7 %
20	6,789	6,719	4,690	560	18,758	16.6 %
17	7,506	8,665	2,712	662	19,545	17.3 %
15	7,993	8,119	5,583	899	22,594	20.0 %
12	5,077	6,519	2,766	242	14,604	12.9 %
10	6,238	5,332	5,167	564	17,301	15.3 %
6	0	253	0	0	253	0.2 %
Totals	39,935	47,477	21,948	3,558	112,918	100.0 %

T2C – Continent by Mode

CONTINENT/Mode	SSB	CW	RTTY	FT8	Total	Total %
AFRICA	82	97	7	192	378	0.3 %
ANTARTICA	0	0	0	0	0	0.0 %
ASIA	4,724	9,545	1,666	14,504	30,439	27.0 %
EUROPE	6,959	17,876	1,044	18,737	44,616	39.5 %
NORTH AMERIKA	8,939	11,211	713	11,335	32,198	28.5 %
OCEANIA	909	768	87	1,697	3,461	3.1 %
SOUTH AMERICA	335	438	41	1,012	1,826	1.6 %
Total QSO	21,948	39,935	3,558	47,477	112,918	100.0 %
Total %	19.4 %	35.4 %	3.2 %	42.0 %		

T2C – Continent by Band

CONTINENT/Band	160	80	60	40	30	20	17	15	12	10	6	Total	Total %
AFRICA	0	2	5	26	37	85	46	74	54	49	0	378	0.3 %
ANTARTICA	0	0	0	0	0	0	0	0	0	0	0	0	0.0 %
ASIA	359	945	27	2,779	3,149	4,001	4,973	5,749	3,825	4,413	219	30,439	27.0 %
EUROPE	16	167	264	2,423	4,749	10,839	9,406	8,322	4,665	3,756	9	44,616	39.5 %
NORTH AMERIKA	145	426	413	1,449	1,485	3,005	4,405	7,216	5,410	8,244	0	32,198	28.5 %
OCEANIA	33	121	46	357	281	569	429	769	335	504	17	3,461	3.1 %
SOUTH AMERICA	0	5	10	54	90	259	286	464	315	335	8	1,826	1.6 %
Total QSO	553	1,666	765	7,088	9,791	18,758	19,545	22,594	14,604	17,301	253	112,918	100.0 %
Total %	0.5 %	1.5 %	0.7 %	6.3 %	8.7 %	16.6 %	17.3 %	20.0 %	12.9 %	15.3 %	0.2 %		

With a reduced team and without the dismantled 80 and 160 m antennas we took part in the CQ WWDX-Contest (Multi-Single). With 4,563 QSOs and 4.9 Million points we were proud about being #50 worldwide and #3 in Oceania.

Regarding the modes we met our target with more than 60% in the traditional modes.

QSL-Service:

Our QSL-cards were printed 4 weeks after returning to Germany, a few thousand QSLs are sent out direct or to the sponsoring DX-Clubs which asked us to do so. LoTW and OQRS-service will be as promised. DL4SVA, our QSL-manager will also answer bureau-cards.

Conclusion:

After HU1DL, P29RO, XX9D ... this was another very successful light-weight-expedition organized by Rolf, DL7VEE. Thanks to all our sponsors and the ham-radio-community which accompanied our DXpedition with positive comments. If You are looking for more information have a look on our homepage.

t2c.mydx.de



On the way back we met Antoine 3D2AG in Fiji

He was glad about the antenna-material we left with him.



Good Bye Tuvalu

9Q2WX - DXpedition to the Democratic Republic of Congo

BY VLADIMÍR ŽENČÁK, OK2WX

The Democratic Republic of Congo is a country in central Africa. It's the second largest state on the continent (after Algeria) and the eleventh largest in the world. With 97 million inhabitants, it's the fourth most populated country in Africa (after Nigeria, Ethiopia and Egypt) and the fifteenth in the world. The country's official language is French, which makes it the largest francophone region in the world. The DRC is also one of the world's richest countries in terms of its mineral reserves: it holds the world's largest deposit of cobalt, which is used to manufacture electronics, and significant amounts of diamonds, gold and copper. This is also why the north and the south of the country are locked in a perpetual state of civil war between rebel groups and government forces.



Spiderbeam at the house

The idea to embark on a DX expedition in the DR Congo first came up in February 2023 when Elvira IV3FSH and I were in Burundi (DX expeditions 9U5R and 9Q2WX) near the border with the DRC. The city of Uvira, which is located on the Congo side of Lake Tanganyika, was only 30 km away. Elvira in fact already had a valid licence for the DRC, which I applied for as well. At this time, however, Uvira was unfortunately one of the many dangerous places in the DRC (second only to the infamous city of Goma) where the M23 rebel group was operating, occasionally making intrusions into Burundi to fire at the local airport. After consultations with the local authorities and the Italian consulate in Bujumbura, we decided to pass on the idea of continuing our DX expedition in the DRC.

So I decided to prepare a single operator DX expedition for September 2023, just before the rainy season, in the safer region of Bombala, which lies north of Kinshasa. In April, I received my 9Q3WX licence and officially announced the dates: 15 August – 3 September 2023. In the meantime, I started to look for a corresponding QTH, which turned out

to be the biggest obstacle. In May, my friends from Kinshasa told me they didn't consider the chosen location to be safe, because last autumn, violence erupted in Bandundu, the capital of Kwilu Province, and the rebels killed 140 people. Another 2,600 saved their lives by fleeing across the Congo on canoes to the neighbouring country.

For this reason, I decided to apply for a change of licence to 9Q2WX in the province of Bas Congo, which is south of the capital. This eventually succeeded. It turned out that I was the only station in the history of the DRC to operate under 9Q2. The vast majority of expeditions worked directly from Kinshasa as 9Q1, a few as 9Q5 and 9Q6, but never 9Q2. The overwhelming majority were foreigners. Even though the DRC has issued 23 licences (in a country of 97 million people), the most recently active station was the ARAC National Association's club station 9QØAR with Robert 9Q1RE and Kahu 9Q1KS (the President and Vice-President of ARAC).

The search for the right QTH started again, this time south of Kinshasa. For safety reasons, I was looking for a very

remote location with enough room for the antennas, a supply of drinking water and food, electricity and an internet connection. The last two items proved to be the biggest weaknesses of the selected spot, which was a family farm bearing the proud name of Ascado Eco Lodge in the valley of the mighty Congo River, overlooking the neighbouring Republic of Congo.

My journey to the DRC began on 17 August in Vienna on board the Ethiopian Airlines flight to Addis Ababa in a modern Boeing 787 Dreamliner, the first plane in the world made primarily of composite materials. The plane was half empty, which is probably why Ethiopian were offering business class tickets in an auction far below the usual price. I persevered and at the last minute, managed to buy a business ticket for a fraction of the price for the entire trip, including the next leg to Kinshasa, where I continued after a six-hour wait in another Ethiopian Airlines flight on board an Airbus 350. Because in business class, you can take three suitcases with 23 kg each instead of the usual two, I paid for all my 120 kg of luggage only

600 USD extra, which was a bargain hi (the 135 cm long ALU mast with tripod, 5-band Spiderbeam and full anchoring weighs exactly 32 kg).

But that was my last taste of luxury for quite a while.



Airport night checkin

Compared to Addis Ababa Bole International Airport, Kinshasa International Airport is like stepping into another world. The runway is bumpy and full of patches; everything is broken down, worn out and barely works. Here I understood why it's not recommended to fly domestically within the DRC, because the local airlines have some of the worst safety profiles in the world. That was also one of the reasons why in my search for the QTH I ruled out a comfortable and safe resort on the Atlantic coast, which is some 860 km from Kinshasa. The journey by car would take over 30 hours and by plane would be far too risky.



PELI cases

Another thing that strikes you upon landing in Kinshasa are omnipresent soldiers with machine guns. They're not a rare sight in Africa generally, but here you see them literally everywhere and can't shake the feeling that something bad is about to go down. The DRC will hold elections in December, which has so

far in the country's history always meant violence and military coups.

That was also the official reason for the change of plans in Silvano IZYSB's expedition (9Q1AA, 9Q1ZZ), originally scheduled to start in Kinshasa in September but then moved to July.

Unlike in Burundi, where I had extensive documentation for the import of equipment, applied for months in advance, in the DRC everything is handled after arrival and fully depends on the arbitrary ruling of the local immigration and customs officials, all corrupt to the bone. After several discussions with the customs officials, my local team agreed on a fee of USD 450. But in practice, everything is eventually decided on the spot, regardless of what was agreed.

When I arrived on the afternoon of 18 August, the small arrivals hall was extremely chaotic and I was slowly getting desperate I would never see my bags again. Thankfully, I was wearing a T-shirt with 9Q2WX on in capital letters, and so someone from my support team quickly found me and took charge of the search for my luggage.

After two hours, he found the first suitcase, and I thought that the worst was over. It was not. After another hour, two more suitcases appeared, but the crate with the mast and antennas was gone, even though the plane had been fully unloaded. Luckily, I had a wire antenna for 80 m and a vertical for 30 and 40 m in one of the suitcases, so I was coming to terms with the idea of working only on lower bands. In the end, it turned out that the local authorities saw the size and contents of the crate as suspicious, and were examining it in the customs warehouse. Five hours after arrival, and many discussions and X-rays later, I found myself with all my luggage in front of the airport hall where a car was waiting for me with a driver and with Robert 9Q1KE and Kahundira 9Q1KS. To leave the airport, which is armed to the teeth, we had to pay the local soldiers a ransom of USD 100 and could finally embark on our 80 km journey.

I managed to buy a local SIM card at the airport, so I fired up Google Maps and was looking forward to arriving at my destination after about 3 hours. I told the driver and he only smiled and explained the traffic was bad. I've been to 76 countries. I have crossed Kenya and Tanzania in a jeep. But traffic in Kinshasa was the worst thing I have ever seen. Old trucks were pressing forward, regardless of any instinct of self-preservation, and pushed smaller cars off the road, demanding

right of way because they're bigger and stronger. Clouds of black smoke poured into our car and I had to learn how to breathe like a diver: just inhale, hold and wait. This would be completely unthinkable in Europe

Kinshasa has 12 million people who live, work and do business even in close proximity to roads, which are mostly dirt. Young people keep coughing, have no idea what their lung X-ray would look like and there's no cleaner air alternative anywhere in the city.

After driving some 30 km, we got stuck in completely clogged traffic for two hours. Because I knew we were going to a secluded farm on the Congo River, I kept telling myself things would get better once we leave the city. But I didn't know what kind of terrain we were going to drive through. Once we left the road behind, we were well and truly off road. Our jeep had a locked differential for maximum traction, but still we repeatedly drove over sharp inclines and into huge holes, so some of our wheels were in the air and the others struggled to find purchase in the brown-red dust. I held on to anything I could and bounced around the car. During rainy season, this terrain would be completely impassable. After seven hours, around midnight on 19 August, we finally reached the destination: the Ascado Eco Lodge. I silently apologised to my patron Kahundira who had been looking for a QTH for me. He had to go through this once before when he went to check out the situation on site and arrange everything.



Transportation Kinshasa

After a short welcome and after I received the necessary supply of bottled water and moved into my room, I fell asleep like a log.

On the second day, 19 August, I started exploring the site and its possibilities. I had had some idea from satellite maps and the photos sent by Kahu, but as always, reality was a bit different.

First of all, the promised internet connection wasn't there, so keeping an online diary was a pure utopia. One after another, I tried SIM cards from all three carriers in the DRC, and even one from the neighbouring Republic of Congo, but none had any signal here at the "end of the world". Throughout the DXpedition, I walked many kilometres up a steep hill with a laptop in hand so I could upload the diary for the previous day to servers in Italy. Even though we said so repeatedly on our website, there were many hams who complained they were not in the log a few hours after they connected.

I stayed in a valley, quite close to the river, open to EU/NA and South America, but uphill to JA / VK / ZL, so I started looking for other places higher up the hill. The family farm was large, with extensive orange orchards, but unfortunately most of the buildings up the hill were adobe and without electricity.



At breakfast

Ultimately I chose the largest bungalow with two bedrooms and bathrooms, which I of course had no need for. But it had a good position and enough room for the antennas, set as far apart as possible. Water ran only occasionally, always cold, and at night I had to make sure everything was sealed tight because of mosquitoes, spiders and snakes, so my



30 m Vertical



30 m Vertical



30 m Vertical - Anchoring

closed ham shack with no air conditioning ran quite hot at night.

There were about five bungalows on the farm, clearly long unoccupied and neglected. Helping me was Leonardo, a chef and waiter in one, who cooked simple meals. Rice, beans, chicken, fish. He had two kinds of local beer, not very drinkable, which is brewed in Kinshasa under a Heineken licence. Early on, he also offered a few bottles of imported French and Portuguese wine, which I eventually drank. No coffee, sugar or other alcohol. Whenever I wanted to go further inland to get some exercise, I was always accompanied by someone wielding a machete.

I regularly applied various repellents from the Centre of Tropical Medicine with guaranteed DEET content, but they didn't do anything. I was bitten all over. Every day I took antimalarial medicines and probiotics. The DRC requires yellow fever vaccination, to which I added vaccination against hepatitis, pneumococcus, dengue fever, cholera and typhoid.

Unfortunately, the farm didn't have a workshop or any tools they could lend me, so even finding a number 17 wrench or an extension cord for soldering a broken lead to the wire antenna was a problem.

The first thing I did after unpacking all suitcases was to set up both verticals for 30 and 40 m and lead the radials and coaxial cables to the ham shack. On the first evening, I was pleasantly surprised that with the exception of QRN, there was no interference from LED lights on 30 and 40 metres in the region, so it could be expected there wouldn't be any on the upper bands, either.

Because the vegetation was low and there was only one tall tree around, I decided to stretch the dipole as an inverted V with an axis of 0 degrees north, pointed directly to the EU. The top of the antenna was unfortunately only 10 metres high, because there were no trees taller than that.

Time passed quickly. Soon it got dark, which meant the mosquitoes came out and with them the risk of malaria. I was still tired from the long journey and the UV light on the equator is intense even if the sky is cloudy, so even with 100 SPF sunscreen, I could only spend a limited amount of time outside.

On the next days, 21 and 22 August, I finally set up and anchored the 5-band Spiderbeam, and after several attempts managed to tune it with SWR under 1.5, with the exception of 24 MHz where I had 1.9.

Because there was no one at the resort besides the chef and the manager, I did most of the work by myself. If you've ever tried to raise a Spiderbeam in the wind solo without holding at least two anchors, you know how tough it can be.

At that time, I still didn't know we were on a typical off-grid island and were making all our electricity ourselves by a small hydro turbine. On about the fifth day, still clueless, I noticed that if I broadcast for more than 10 to 15 minutes with PA, the hum in my headphones starts getting stronger, then I get a bang, the linear switches off and the radio resets. At first, I thought it was some stray high frequency from imperfectly grounded equipment, even though I had my favourite galvanized rod 70 cm deep in the ground. I followed advice from Italy and the Czech Republic and put ferrites everywhere, connected the grounds wherever I could, but nothing helped.

Eventually the local "engineer" took me to the small hydroelectric plant and my jaw dropped.



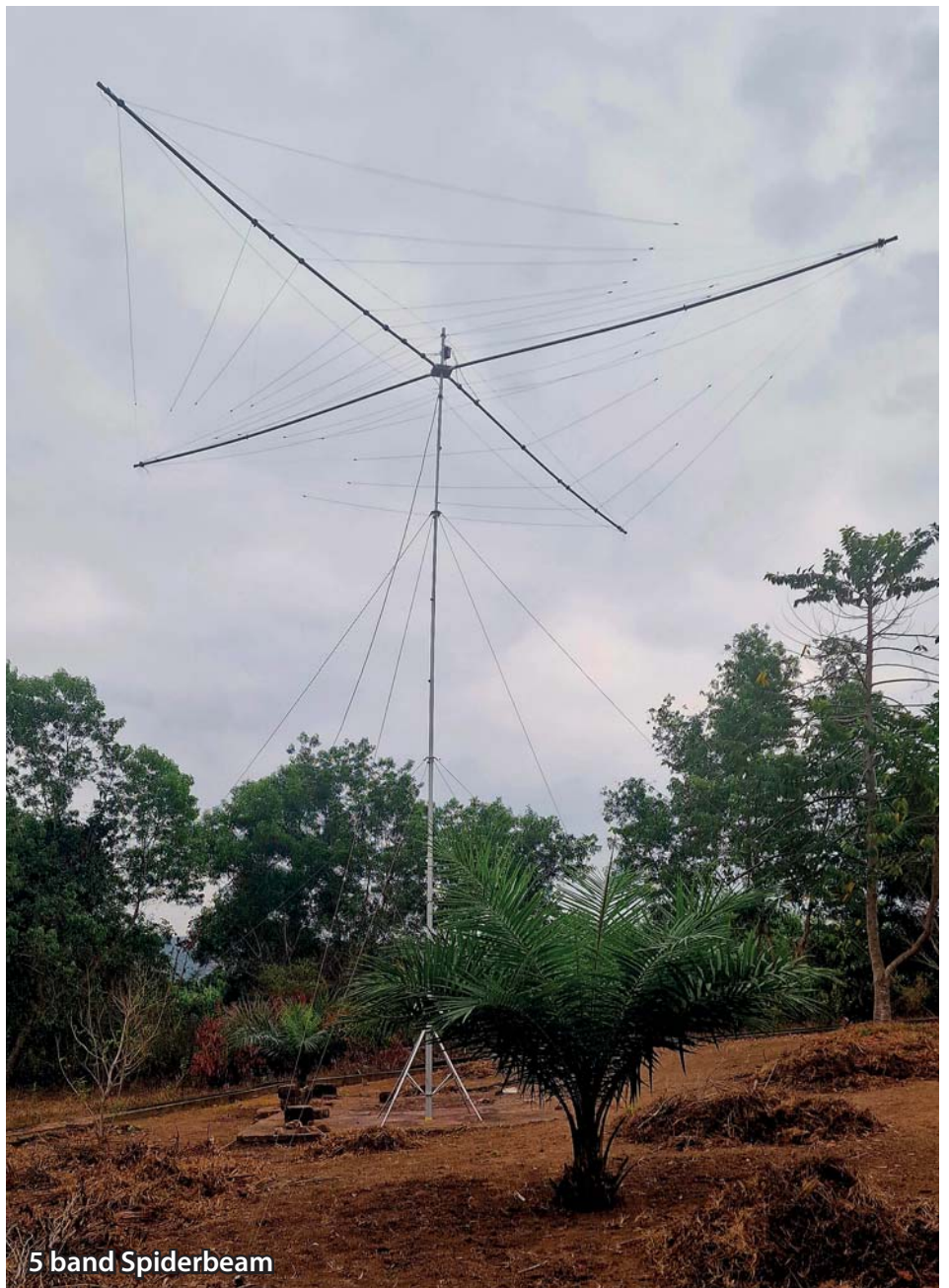
Hydroelectric turbine



Power distribution



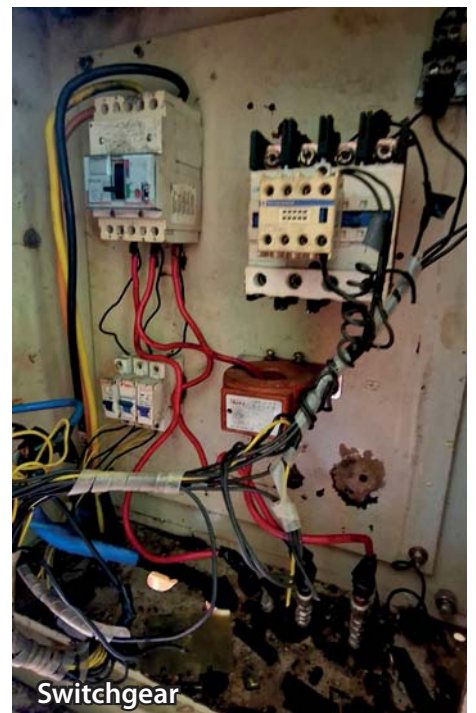
Power generator



5 band Spiderbeam

Everything was mechanical with no stabilisation anywhere.

When the water flow well, the grid had 230 V and maybe even 50 Hz. But at lower flow rates and generator speeds, the voltage and frequency in the island system started to fluctuate. First, we tried to solve the problem by accumulating water in the upper part of the pumping tank by closing the inflow to the turbine and switching on the petrol power generator. The condition of the generator and limited stock of fuel led to first serious arguments, because the South African manager insisted that the old generator could only run for two hours a day and because the delivery of petrol takes several days. Downtime caused by the unstable power grid of course led to delays, and so did the repeated uploads of the log, caused by internet outages during data transmission.



Switchgear

For this reason, I often only used 100 W on the upper bands, and at night, I broadcast on 40 and 80 m with PA at 800–1000 W running from the generator. The situation also fluctuated a lot; on some days, the grid was in a better shape than on others, where a few calls led to a collapse of the whole system. Because I didn't have internet access, I couldn't announce a spot on a given frequency. This was particularly noticeable on the lower bands, until someone discovered the weak 100 W signal on 80 or 40 metres and put me in a cluster.

I was very surprised that I didn't have to turn the Spiderbeam from its stable 0 degrees to EU/NA even to reach JA stations, which were coming on 20 and



Flow control Hydroelectric

17 metres in great strength on CW and SSB, even though they were effectively outside the antenna's main beam an-

gle. Perhaps they were helped by the giant surface of the Congo River, which glistened like a mirror at sunset



Congo River

The river comes directly from the north and the antenna was pointing in the direction of its flow. Only in the morning, at 7–8 UTC, I rotated the anten-

na to 90–100 degrees, particularly on 12 and 10 metres, for VK / ZL. The Spiderbeam has two directors here and a slightly narrower radiation pattern.

After 00.00 UTC, the European pileup on 20 metres was replaced by an American pileup with many strong stations, including W6, KH7 and KL7.

On the other hand, I was disappointed by the traffic on 80 metres. The Inverted Vee antenna hung 10 m high clearly performed worse than the 80 m delta loop hung on a palm 32 m high on my DXpedition 5H3WX. I was clearly missing a Beverage for listening and a vertical for broadcasting. But the 80 m band is not ideal in the summer, and I didn't expect to see much traffic there in August. The experience I had with queues of JA and W6 stations at 80 and 160 metres on 9U4WX and 8Q7WX in February did not repeat itself.



Not to mention that the bazooka tore off in the wind, in the place where the shorted coaxial cable with the soldered wire was fixed. The repair turned out to be a lot more complicated than it seemed at first. My little 30 W soldering iron for circuits couldn't heat the joint properly, so we opted for an "African-style crimp". All you need is a small copper tube, into which you lead the two ends of the broken wire, and a big hammer. The antenna continued to serve until the end of the expedition.



When the water runs out and the turbine has no speed

At least I made many JA and K stations on 80 m FT8 happy. Both quarter-wave verticals on 30 and 40 metres also per-

formed excellently, both CW and FT8. In the times when I had an internet connection, I was in the right time window for JA, and communicated with Hiro JA4DND ^[1] in Tokyo over messenger. He gave me online reports on how the conditions were changing, what was my readability in dB and how many streams I should let on FT8 to make connections possible.

Unfortunately, I have once again seen that the rule of "listen first, then call" is completely forgotten these days. As usual, the Southern European and Russian stations were the worst; they keep calling all the time, regardless if there's a connection in progress. It's impossible to finish a connection even after a station repeats its call sign many times, because it's literally wiped out by ten other reckless callers. This was particularly problematic on the SSB; a split of 5-10 was often not enough to maintain a reasonable QSO rate. Jacek SQ8GKU sent me a nice video of the pileup from Poland, which he put on YouTube. On CW, I used the narrowest filter IC7300, which required constant retuning to be able to hear the entire call sign in one second. My QSL manager Antonio IZ8CCW has a good term for this: "ZOO as usual"

On Monday 28 August, a bush fire started not far from us, and the fire was spreading toward my QTH. I stood on the terrace, watching the flames and wondering whether to start packing my radios and PAs or just run straight to the river.

The locals, however, were perfectly calm.

Later I found out that something was on fire all the time here and no one really cared. Time passes slowly. People sleep after lunch. No one is in a hurry. The only person running back and forth was me, trying to upload my diary whenever I had an internet connection.

After the experience I had during arrival, I started planning my departure. It was clear that I needed to go to Kinshasa at least a day before the flight leaves, and given the traffic in the city, would need a hotel near the airport. Kahu 9Q1KS promised he would come the day before to help take down the Spiderbeam, and I promised I would let him have it to support amateur radio in the DR Congo.



Vice President ARAC 9Q1KS



^[1] Hiro JA4DND is a member of the European DX Foundation (EUDXF)



Bush fire

Because punctuality is not considered a virtue in Africa, I actually started dismantling the Spiderbeam a day earlier, on the afternoon of 8 September, so I would be done before dusk. For the night, I kept only the antennas for 80, 40 and 30 metres and the last night worked only on the lower bands.

Kahu arrived on the next day, 9 September, before lunch and together with Jeff, my “engineer” from the power plant, started packing the disassembled Spiderbeam into crates. I also gave Jeff a small cheap multimeter, which for him was worth its weight in gold. I also promised Kahu an older IC7300 which had returned from Burundi all battered because the suitcase got torn along the way. But it’s fully functional and already up and running in the Kinshasa radio club.

The trip back to Kinshasa only took 6 hours. At the hotel, I had my first opportunity in more than three weeks to take a hot shower and wash off all the dirt.

The plane was leaving on the next day, 10 September, in the afternoon, but my team decided we would go to the airport already at 8 a.m. They knew why. You would think that leaving the country would be easier than coming in. But you would be wrong.

In the DRC, you don’t just arrive at the airport and check in. On the way in, there were several inspectors who carefully examined all documents for a very long time. I had with me 5 people from my

team, who after much discussion managed to get me past the second check and to the luggage inspection. They wanted to know what I had been doing in the DRC and what all the wires were for; then they inspected my documents again. My escort patiently explained everything in Lingala, of which I don’t understand a single word. I just watched



On the left, my cook Leonardo and driver

their facial expressions to try and guess whether things were going favourably for me or not. I was particularly worried

technical help, Francesco IKØXBX for his FT8 support, in the Czech Republic also Ivor OK2VWX for his help with the antenna setup, Stan OK2HAM for his help with the PA and last but not least my XYL Paula for her involvement in the whole project.

Thanks also to:

Corporate sponsors: Mastrant, Beggali keys, Wireantennas, Spiderbeam, DX Commander

they would ask for exorbitant bribes. After the third check, I was accompanied by just one bribed official who took me to the scale where I had to pay for the extra weight. Only then could I continue to check-in. As a bonus, I received a Priority sticker, which gave me hope that I might be reunited with my suitcases in Europe after all.

I also had to pay the official departure fee of USD 55 on the other side of the hall, which required standing in a queue for an hour. Believing that this part was over, I finally made my way to the immigration checkpoint with barriers and handed over my passport for inspection. The army immigration officer kept looking at my passport, examining it and asking questions full of suspicion and mistrust. Where exactly I had been, what was I doing in the DRC, what was my job and other questions like that. I had to write down the name of the farm on a piece of paper and point to it on a map, all the time expecting to be arrested. I don’t know why, but I remembered the scene from Argo in which people from the Canadian embassy disguised as filmmakers are trying to get out of Iran.

When I finally made it to international transit, I started to believe I would actually get to leave the Democratic Republic of Congo. The next morning, on 11 September at dawn, the Boeing 787 Dreamliner from Ethiopia landed in Vienna. After 18 hours of travel, I was home.

Foundations and Media Partners:

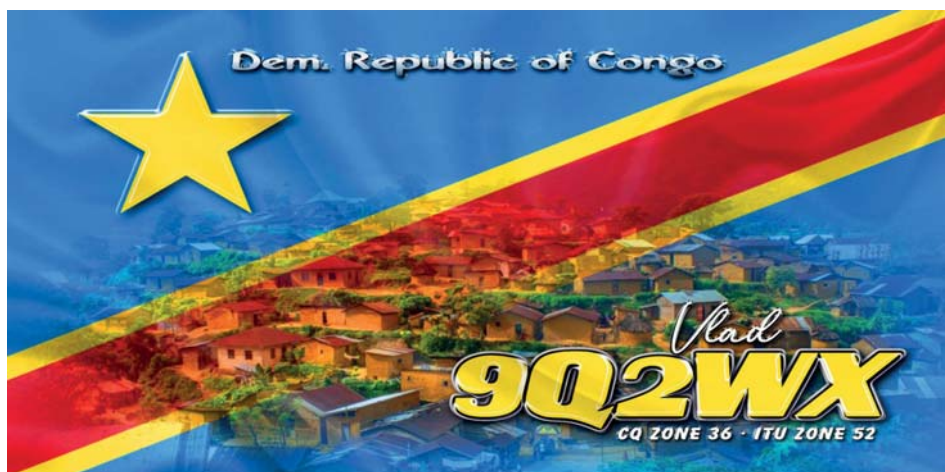
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A total 26,911 QSO were made, of which 10,601 CW/SSB and 16,307 FT8. Total 3 continents, 32 CQ zones, 38 ITU zones, 131 DXCC countries and max QRB 18,003 km.

My biggest thanks go to the folks in the D.R.C, Kahundira 9Q1KS, Roberto 9Q1KE, my manager Zola Kifuma Grace, my “engineer” Jeff, my cook Leonardo, the Italian team Antonio IZ8CCW for the daily upload of the log, Marco IZ2GNQ for the



QSO by Band/Mode					
	FT8	SSB	CW	Total	%
15m	4040	1821	1225	7086	26.3%
30m	2522		258	2780	10.3%
10m	2509	837	1126	4472	16.6%
12m	2301	544	954	3799	14.1%
40m	1700	13	370	2083	7.7%
20m	1668	985	823	3476	12.9%
17m	1275	668	926	2869	10.7%
80m	292		46	338	1.3%
Totals	16307	4868	5728	26903	



Local woman



The School



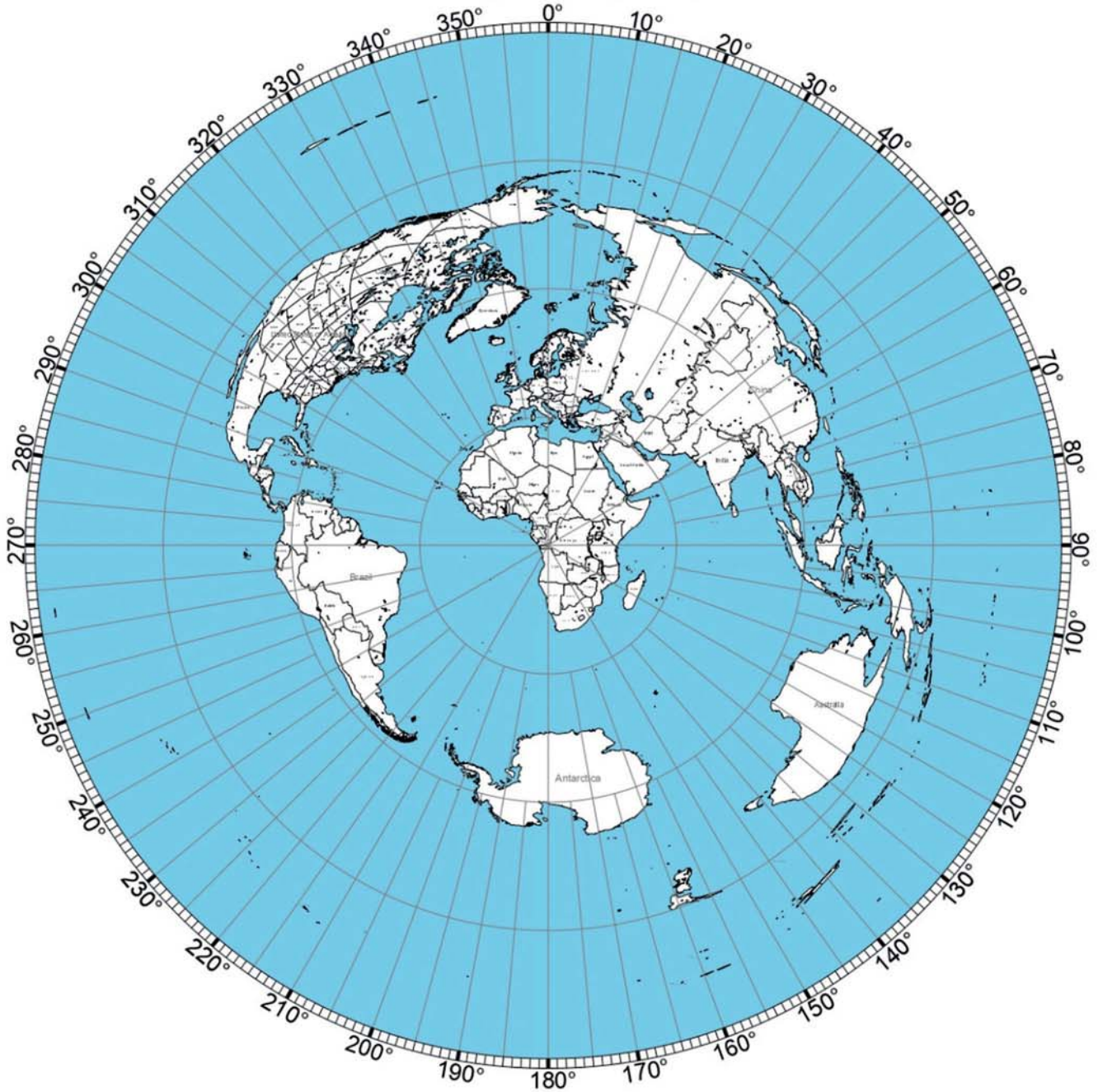
Village



Azimuthal Map

Center: $4^{\circ}36'15''\text{S}$ $15^{\circ}12'29''\text{E}$

Courtesy of Tom (NS6T)



Map from <http://ns6t.net/>

The DXpedition "Micronesia 2023": V62P and V62S

BY CEZAR TRIFU, VE3LYC

My goal was to activate two rare IOTA groups in Micronesia: OC-299, the only IOTA reference out of 16 there still unactivated, and OC-155, last operated from 19 years earlier and in demand by 86 % of IOTA members. I wanted to use a regular passenger boat from Weno to the Western Islands of Chuuk (OC-155), and only charter it from there to Satawal, in the Eastern Islands of Yap. National Fisheries Corporation (NFC) had a power boat in Weno capable to do this voyage, and after consultation with the boat's captain, their CEO agreed to my demands. Less than ten days before my

departure from Canada, I learned the shocking news that captain Callistus died due to a stroke. Despite this tragedy, NFC suggested me to arrive there as scheduled, at the end of October 2023, as they were determined to see this project through.

There is no regular boat service to the Western Islands of Chuuk. It took NFC 12 days to have sufficient passenger and cargo bookings for a trip there. Their 90 ft power boat North Star is usually servicing the islands east and south-east of Weno, toward Phonpei. Trips to

the Western Islands are every couple of months or so. The schedule for this voyage was to stop at eight of those islands, and then charter me to Satawal (OC-299). The boat will then return to Weno to pick up a hydro crew, in charge of measurements for the design of solar power systems, drop them on Puluwat (OC-155), and come to pick me up and bring me to Puluwat. After this, the boat will take the hydro team to other islands for data collection. The boat would finally return to Puluwat to retrieve me, before returning to Weno.



North Star (center), a 90-ft power boat that I used to reach Satawal and Puluwat islands

The long wait in Weno required a lot of patience and determination. The rest of the plan didn't go as scheduled, leading to several delays. On the one hand, this allowed me to operate longer from each island, but on the other hand it created uncertainties associated with those changes, which impacted the logistics. For example, laying down and sleeping on a hardwood and cement surfaces for 24 days and nights was much longer than expected, and took a toll. I borrowed some linen, blanket, and pillow from Weno, but they provided little comfort if any.

Satawal island has a little over one square kilometer of surface and 500 inhabitants, living in three villages, each led by a Chief. There is one school on the island, with 130 students. A wide system of small solar panel farms was installed before the covid pandemic. This system was intended to provide 120 VAC by operating with normal acid batteries. Unfortunately, the water inside those batteries evaporated before the maintenance noticed it, which affected their performance, as the system can only be used during core daylight.

To prevent their houses from being

damaged during large cyclones, locals built them on ground raised by using coral rocks. They collect rainwater in massive tanks and from there it is pumped into smaller vessels placed on bathroom sheds, to be used for showers and toilets. The limited high ground led to high density housing. This, in addition to ample and tall vegetation, made it virtually impossible to place and operate in the village the multiband vertical antenna that I brought with me. Following failed trials, I decided to install it on the beach.



Multi-band vertical installed on the beach



V62S was operated from an open hut located near the beach

With Chief Robert's permission I was allowed to operate the station in a small open hut nearby, which was enjoyed by

local men to congregate in the evenings and drink tuba, fermented coconut water. The noise created at these gatherings

was significant, but manageable wearing headphones.



Locals gather in the evening to enjoy tuba



V62P transmitted from the school premises

Similar in surface to Satawal, Puluwat has only about 300 inhabitants, organized in two villages. The school has approximately 70 students. There is no high ground on the island, and as a result some houses have been completely destroyed by a cyclone last April. There are no toilets though, and modern houses, built to replace those destroyed, have no provision for them. High density housing and vegetation makes it difficult to find open areas where a vertical with radials can be installed. My host,

Hernit Ikea, Deputy Mayor, deemed unsafe placing the station in an isolated, and recommended instead that I set it up at the school, in one of its classrooms, while the antenna can be installed in the courtyard.

My original schedule was to be on the island from Friday to Monday morning, when the school was closed. As such, Lisa Ikea, School Principal and Hernit's wife, agreed to his plan. However, when my departure was postponed, it was obvious that my activity interfered with

the kid's playground during recess. Despite my attempts to move to a different location, Hernit feared for the integrity of my equipment elsewhere, and convinced his wife to let me occupy the respective classroom for the entire duration of my stay on Puluwat. There is no electricity on Puluwat, but the school has internet access. Unfortunately, the system frequently hangs up after hours, and can only be reset in the morning.



I slept on a concrete floor inside one of the classrooms



People from nearby islands come often to Weno in their motor canoes for shopping

East side of Satawal Island

There were lots of sandflies on Satawal, but they were present only during daytime, and confined to the beach area. It only took me a few minutes to take the mast down and move the connections on the vertical and radial wires for a band change. As such, sandflies were nothing more than a minor nuisance. On Puluwat though, tiny mosquitoes reigned supreme after dark. Staying up at night and using light to operate, I was a sure target for them. I kept scratching the bitten skin above the ankles until it became infected. Without any treatment, the skin infection gradually spread to larger areas of the legs, leading to fever and sleepiness.

NFC provided some food provisions for the sea voyage for the crew and me. Nev-

ertheless, I also purchased some food items for us, but some of them didn't make it to the boat, which I only realized long after we left the port. I found the food served by the crew uninviting at times, which is why I eat very little during the voyage. On Satawal, my host Francis not only insisted that I eat, but succeeded to render the meals appetizing. However, on Puluwat, my hosts were very busy with their daily activities, and ended up serving me food every other day. Worth noting, my attempts to ration it to last longer were unsuccessful, as food went bad very quickly in that hot and humid climate.

I purchased sufficient gas in Weno to be able to use a 2kW Honda generator as much as needed. Additionally, I made

a 20-liter provision per island, which I intended to leave with my guests. Everything worked as planned on Satawal, where I was able to use the local power grid during the core daytime hours. Later on, though, the extension of the operation from Puluwat obliged me to ration fuel during the last couple of days on the island to remain on the air. Despite coordinating my efforts with Hernit, I was unable to find anyone unwilling to sell me any amount of gas, at any cost. Interestingly, the activities associated with fuel rationing provided sufficient motivation to keep me alert, compensating for my state of drowsiness due to the skin infection, enhanced by scarce nutrition.



Puluwat Island has a narrow beach and high density vegetation

Flying the IOTA flag on Puluwat Island

I used an Icom IC-7000 transceiver and an Elecraft KPA-500, along with a multi-band vertical antenna. The propagation conditions were such that signals from Far East, Southeast Asia, and Oceania

were generally strong. This required dedicating time windows for listening and working stations in Europe, as well as in North and South America. While propagation to Europe was open on

different bands for several hours per day, it didn't move well into Western Europe at times, or didn't open at all during some days. The time windows for North and South America were much shorter

than those to Europe. I appreciate that chasers respected my directional calls to different continents, thus allowed those chasing these rare IOTA references to have a chance at logging them regard-

less of their location on our planet.

The tables below include the log statistics for both V62S (Satawal, OC-299), operated between 13 and 22 November, and V62 (Puluwat, OC-155), operated

between 24 and 30 November 2023. Note that the combined logs include chasers from 99 DXCC who had contacts with this DXCC entity.

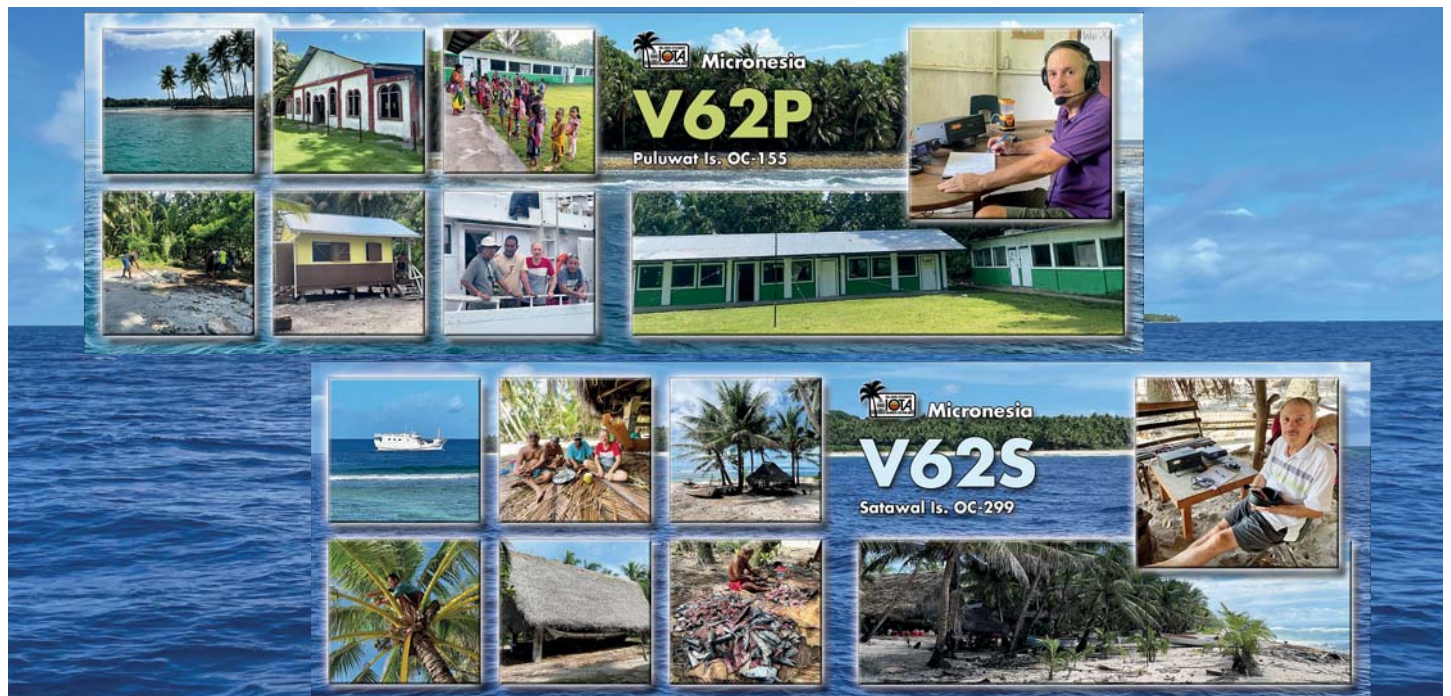
V62S		Cont	QSO	%	Band	QSO	%
QSO	6,466	AF	13	0.2 %	10 m	179	2.8 %
CW	68.7 %	AS	1,952	30.2 %	12 m	1,265	19.6 %
SSB	31.3 %	EU	2,803	43.3 %	15 m	2,104	32.5 %
Stations	4,090	NA	1,438	22.2 %	17 m	1,459	22.6 %
DXCC	94	OC	197	3.0 %	20 m	1,440	22.3 %
CQ Zones	34	SA	63	1.0 %	30 m	19	0.3 %

V62P		Cont	QSO	%	Band	QSO	%
QSO	2,618	AF	2	0.1 %	10 m	17	0.6 %
CW	76.6 %	AS	761	29.1 %	12 m	798	30.5 %
SSB	23.4 %	EU	1,010	38.6 %	15 m	596	22.8 %
Stations	1,974	NA	761	29.1 %	17 m	122	4.7 %
DXCC	79	OC	67	2.6 %	20 m	658	25.1 %
CQ Zones	32	SA	17	0.6 %	30 m	427	16.3 %

Acknowledgments

Patricia Jack-Jossien, Mark Marar, captain Mariano and the crew of North Star are acknowledged for providing boat transportation to the islands. I am indebted in Satawal to Chief Robert, my hosts Francis and Lorida Seremalipiy, as well as to Gary, Tito and Wino for their help. The enthusiastic support received on Puluwat from Hernit and Lisa Ikea was essential for the success of this project. I also want to thank Marwan, Sammy and Gus for their assistance.

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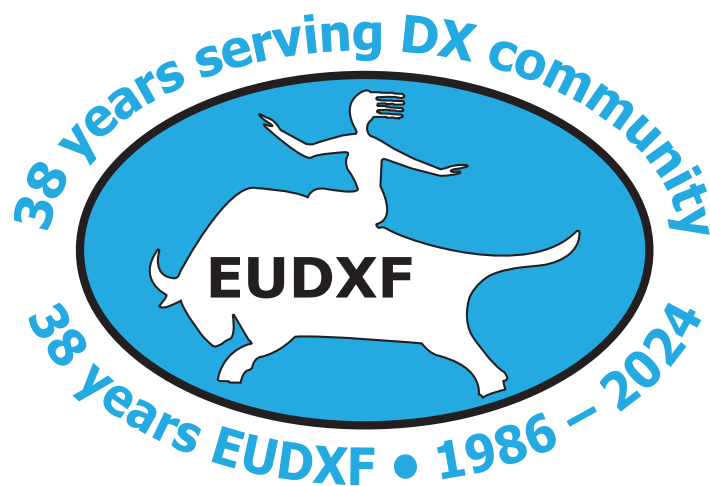
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EUROPEAN DX FOUNDATION E.V.

Data Protection Declaration (Members)

Section 1

By joining of a member, the association records the name, first name, date of birth (optional), home address and e-mail address of the member. This information is stored in the computer systems of the executive committee. Each club member is assigned a membership number. The personal data are protected by appropriate technical and organizational measures against the knowledge of third parties. Other information about the members and information about non-members are only processed or used by the association if they are useful for the promotion of the purpose of the association and there are no indications that the data subject has a legitimate interest, which precludes the processing or use.

Section 2

The board announces special events of the association life, in particular the execution of events in the club magazine and/or on the club's own internet pages. Personal member data can be published at this juncture. The individual member may at any time object to the publication of such data by the board. In this case, there will be no further publication in relation to this member on the notice board and/or in the club magazine and/or the club's own websites.

Section 3

Only board members and other members who perform a special function in the association, which requires the knowledge of certain member data, receive a list of members with the required membership data.

Section 4

The association informs the amateur radio related media about special events. Such information is also published on the website of the association. The individual member may at any time object to the publication of his personal data or revoke his consent to publication on the Internet. In the case of an objection or revocation, further publications regarding his person are omitted. Personal data of the withdrawing member will be removed from the homepage of the association.

Section 5

Upon resignation, the data of the member named under section 1 will be deleted from the member list. Personal data of the withdrawing member concerning the cash management will be kept for up to ten years from the written confirmation of departure by the Board in accordance with the tax regulations.



EUROPEAN DX FOUNDATION e.V.



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I herewith request membership in the European DX Foundation e.V. (EUDXF). Membership fees are a minimum of **€ 25 per year** and payable at the beginning of the year. Membership will be **renewed automatically** unless written notice is given not later than **6 weeks before the end of the year**.

First name: _____ Date of birth: _____
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Call Sign: _____
Address: _____
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I would like to become a life member: *(The price of a family life membership is still EUR 400)*

The EUDXF also offers a family membership. The first member will pay **€ 25** for full membership. For each additional family member **€ 15** will be charged, given that the family members share the same QTH.

First name: _____ Date of birth: _____
Surname: _____ Call Sign: _____
E-mail: _____ @ _____

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I will pay the contribution to the bank account of EUDXF:

Bank: Volksbank Kleverland
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I will transfer the contribution via PayPal to cashier@eudxf.eu

**I have read the privacy policy and herewith accept it.
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Signature: _____ Date: _____

Please mail this application to:

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