



NCDXF newsletter

ncdxf.org

Spring 2024

Clipperton Island, TX5S

~ Gene Spinelli, K5GS



Introduction

CLIPPERTON ISLAND, LOCATED IN THE northeastern Pacific, is situated 1,626 miles (2,618 km) south of San Diego, California, and 795 miles (1,280 km) west of Acapulco, Mexico. Having a total area of about 4.6 square miles (12 sq. km), the island is at sea level with only a few rock formations that protrude above the surface; the highest being Clipperton Rock at 95 feet (29m).

At the island's center is a large brackish lagoon that, on occasion, can be breached by seawater storms. The maximum depth of the lagoon is 241 feet (73m), with the top layer being rainwater.

The lagoon is stratified (layered), and the water doesn't mix. In the past, inhabitants drank the water, but we were advised against it. Several

team members did use the lagoon for bathing.

The ground is generally densely packed sand on a volcanic and coral base. However, crabs have burrowed beneath the surface, creating a maze of underground tunnels that made for an unstable footing. Traversing these areas, the ground would easily collapse beneath our feet. We quickly learned to avoid those areas, and instead walked along a well-traveled, packed-down path between the beach and the campsite.

There is very little vegetation on the island. The few palm groves, grasses and tree tobacco plants were remnants of attempts to inhabit the island for commercial or military purposes. Wildlife consists of the ubiquitous masked booby, crabs and rats; the latter purportedly introduced by shipwrecks.

The weather was hot, humid and windy; rainfall was minimal. However, on the last morning while removing the overnight team and equipment from the island the sky opened with a monsoon-like downpour.

The United States made claims to the island in 1856, but France had already done so a year earlier. In 1897, Mexico stationed a garrison of military personnel on the island, but by 1914 all inhabitants left the island. Today, Clipperton is a French possession — the only French Pacific island in the northern hemisphere. For many years, the US, Mexico and France each laid claim to Clipperton, but it wasn't until 1930 that France received full ownership when King Victor Emmanuel III of Italy adjudicated the dispute and awarded the island to France, whose original claim dates to the year 1711.

In 2016, France enacted a 200-nautical-mile marine reserve around the *continued on page 3*

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From the President's desk

VISALIA 2024 (IDXC) IS HAPPENING. MANY THANKS TO co-chairs Bill Kendrick, N6RV, and Mel Hughes, K6SY. For all the convention info, visit dxconvention.org.

Bill, N6RV, jumped in and made this year happen, with help from a prior chair, Mel, K6SY. There are raffle tickets, with some wonderful prizes, Saturday banquet, forums and academies, and most importantly — your fellow hams for eyeball QSOs. DXpeditions are back. You might hear rumors of an entity trip being planned, or even get invited to join a DXpedition.

Many thanks to this convention crew. It is important and thrilling to see this convention continue its long history.

With the return of DXpeditions, the comments often heard is “Why so much (or only) FT8?” “Sometimes it seems the team is only operating FT8.” Critics ask, “What happened to the traditional modes — CW, Phone and RTTY — and can the Foundation change its funding priority to deal with this issue?” We’ve been asked, for example, to fund only non-FT8 DXpeditions; to insist that DXpeditions do an equal amount of operating on all modes or give priority to CW, etc.

Our success has been sticking to our primary mission: provide necessary support for well-organized DXpeditions to desirable DXCC entities. We continue to do that. We’ve also had a policy of not trying to run a DXpedition or dictate how it will operate. Our only requirement has been to submit all QSOs to LoTW within one year of the operation ending. All our directors have experience with DXpeditions, and often provide advice to the DXpedition organizers. One of the items discussed is to operate on all modes and bands if possible and take an amp along. That discussion also includes a reminder about the ARRL DXCC rule prohibiting automated FT8 QSOs.

That said, FT8 is the wave of the future ham, and newer operators. It’s a genie we can’t and don’t want to put back in the bottle. Our challenge is reaching those newer operators and getting them to support NCDXF.

Finally, it is important to note that NCDXF is now offering to cover certain budgeted expenses for youth operators on funded DXpeditions (travel, etc.) We ask that a funded DXpedition submit info about a youth candidate, the requested funding amount, and we will review their request. We don’t have any specific rules other than age (18-25 years old), rather, we leave that up to the DXpedition. If you know of a young person in that age group you think we could recommend to a future DXpedition, please send us their name.

As always, we thank you and appreciate your support.

Thanks to our editor, Lee, KY7M. In this newsletter we have articles for recently completed DXpeditions that received NCDXF grants: TX5S (Clipperton), PRØT (Trindade), 7O2WX (Yemen), W8S (Swains), ZD9W (Tristan da Cunha) and TX7L (Marquesas).

Sadly, we also report the passing of Steve Merchant, K6AW. Please read N1DG’s tribute (*page 16*).

See you at the Visalia convention! *Kevin J. Rowett*



CONTRIBUTIONS NCDXF relies heavily upon the generosity of its contributors to fund various projects. We ask you to consider making an annual contribution of US\$50 or its equivalent in foreign currency. However, we do not wish to exclude anyone from the Foundation for financial reasons. If \$50 is not within your budget, then please give what other amount you can. Naturally, we welcome contributions in excess of \$50! NCDXF is an organization described in Section 501(c)(3) of the Internal Revenue Code and all contributions are tax-deductible to the extent permitted by law for U.S. taxpayers. Send your contribution to: NCDXF, PO Box 2012, Cupertino, CA 95015-2012, USA. You may also contribute and order supplies online via our secure server, visit www.ncdxf.org/donate.



The Shogun provided the team comfortable transportation for our DXpedition.

island to protect its marine environment. Today, landing on Clipperton requires a permit issued by the French government.

Planning and preparation

The global pandemic ended almost all DXpeditions, and the Perseverance DX Group (PDXG) had some time to think about the future. Unfortunately, a government agency we had been working with before the pandemic reversed a previous decision and declared that Amateur Radio was no longer an acceptable reason to visit their entity. Shortly after the world reopened in 2022, we did a two-week fly-in to the Austral Islands as TX5N. It was fun, but we wanted another boat-tent-generator DXpedition.

Securing transportation

When Clipperton came on the radar, we didn't begin the landing permit process without first having a boat. In July 2022, a telephone call was made to Frank LoPreste, owner of *Shogun* from San Diego, California. Frank and the *Shogun* had been to Clipperton many times for scientific, sportfishing and DXpedition projects. Frank knew the island well, and one of his employees had been to Clipperton several times.

Shogun's sleeping arrangements include 13, two- and three-person cabins. With a total of 19 passengers,

we assigned two people per cabin and placed radio equipment in the unused cabins. The boat's dining/salon area was large enough to seat the entire team for meals and meetings. To avoid accidents, while underway, meals were served by the boat's crew and there were always snacks and refreshments available in the galley. *Shogun* has four heads and three showers which made it more comfortable than our previous DXpedition boats.

Tackling hurdles

After receiving a commitment for a boat, the next hill to climb was the landing permit. Clipperton was administered from French Polynesia by the office of the High Commissioner. I enlisted Jacky Calvo, F2CW/ZL3CW, a French national, to help and he asked Phillipe Gloaguen, FO4BM, to be our on-site Tahitian representative and to help me with the translation of our proposal(s) into French.

We were told that a landing permit for Clipperton would not be issued because of the changes in 2016 to the laws governing the island, which made Amateur Radio an unacceptable reason to issue a landing permit; however, after many email exchanges and telephone calls, Phillipe found a middle ground.

Under the new regulations, a project must include scientific content. The next challenge was to enlist the help of

bona fide individuals who had scientific standing with the French government. Phillipe, FO4BM, reached out to Anthony Tchekemian, a professor at the University of French Polynesia, an accomplished author who, in 2016, published a book about Clipperton Island. Anthony wanted to return to the island, and he agreed to conduct additional studies during TX5S. Joining Anthony was Patrick Lelue, a professor from the University of Orleans. Also joining the team was Jean-Francois Beaulieu, who represents an organization in Paris, the Association la Passion-Clipperton, whose goal is to protect Clipperton's environment.

With a credentialed science team and a government-approved boat, we received the landing permit in March 2023. The next requirement was a call sign. We had worked with the ANFR (France's licensing agency) for the TX5N project, so we had a good idea what they required. ANFR graciously agreed to reserve TX5S for us.

Assembling a team

With a boat, a landing permit and a radio license, the next task was to build the team. With Jacky, ZL3CW/F2CW, as the team leader; and Steve Dyer, W1SRD; Dave Lloyd, K3EL, and Gene Spinelli, K5GS, as co-leaders, we went ahead staffing the team and building the project plans.

The project cost indicated we'd need a larger team than usual to keep the team member fees reasonable. The radio team included 16 experienced DX and/or contest operators: Jacky, F2CW/ZL3CW; Dave, K3EL; Steve, W1SRD; Gene, K5GS; Glenn Petri, KE4KY; Rob Fanfant, N7QT; Walt Wilson, N6XG; Heye Harms, DJ9RR; Francesco Valsecchi, IKØFVC; Dave Jorgensen, WD5COV; Ricardo Rodrigues, PY2PT; Andreas Junge, N6NU; Arliss Thompson, W7XU; Chris Tate, N6WM; Nodir Tursun-Zade, EY8MM, and Paul Ewing, N6PSE.

Many of the team members knew one another from previous DXpeditions, or had met at ham radio events. We knew there would be significant interest from the DX community since the most recent major DXpedition to Clipperton was TX5K in 2013,



The TX5S campsite amongst myriad masked boobies.

11 years prior to our proposed date. Anyone newly licensed or taking up DXing since the last project would need FOØ/C. Additionally, neither 60M nor FT8 operation had been used previously on Clipperton.

In preparing for the DXpedition, we held several planning teleconferences. Topics included living on the island, radio/antenna planning, operator scheduling, travel planning, permitting and licensing. Each team member was required to have a French license in addition to their own license, and the TX5S license.

At the 2023 International DX Convention in Visalia, John Kennon, N7CQQ, offered us equipment he used on previous Clipperton DXpeditions. John provided the power grid, several shipping cases, and 225 one-meter rebar stakes used to guy the antennas. This alone saved us several thousand dollars.

Readying for departure

Ten of the 16 team members lived in the US, and seven within a day's drive to the boat. The team began arriving in San Diego, on 8 January 2024. There we spent a few days buying last-minute items, including a three-day supply of emergency food should the weather make replenishment from the *Shogun* impossible. While previous DXpeditions required us to ship thousands of pounds of equipment across the world, departing from San Diego saved us

about \$25,000 in shipping expenses, plus drayage and port fees. We chose to hire a truck and make the 12-hour drive with the equipment to the boat ourselves.

On 9 January, our equipment was loaded aboard the *Shogun* and we departed two days later for the planned 6-day transit to Clipperton Island. A Garmin inReach personal locator allowed our families to follow our progress. In addition, the boat had a Starlink Internet terminal, so email and telephone calls were possible.

Local weather resulted in a late start, the seas would be rough and the boat pitching and rolling right out of San Diego. The skipper decided to wait out the weather front that was passing through. Our journey took about 1.5 days longer than planned — the seas were rough and the boat was getting knocked about quite a bit; several of the team retired to their cabins. When we arrived at Clipperton, the skipper circled the island looking for the best landing zone, choosing to stay on the leeward side where the surf would be less of a problem.

Treacherous landing

Operating from an island can be challenging — especially an uninhabited island where you're completely on your own. Of real concern was the landing situation. Clipperton is surrounded by a shallow reef, reaching out 25 to 50 meters from the beach. As

we watched the surf break over the reef, it was the first indication that landings wouldn't be "routine." There was no protected bay or harbor.

We had been forewarned that transiting to and from the island would be dangerous. Both the High Commissioner who issued the landing permit and *Shogun's* owner Frank LoPreste made it very clear there would be challenges getting over the reef. During the 2013 TX5K DXpedition, the team spent three days without replenishment because of dangerous surf conditions.

Shogun's crew used three custom-made aluminum skiffs for the landings. The skiff's reinforced hull was less prone to damage when striking the reef or the rocky shore. It was only possible to go ashore during high tide, and during daylight hours. This, of course, limited our transit opportunities, how much equipment could be brought ashore, and when.

Only one crewmember had been to Clipperton; the others were unfamiliar with crossing the reef. After a few tries, they learned how to navigate the reef. A defective fuel tank caused us an additional delay. As the wind and surf were building, it became more challenging. We began taking people and equipment to the island. When one of the skiffs was swamped and some campsite equipment lost, further attempts to land on that (first) day were halted.

The team members on the island had some supplies for the night, although not all the tents they would need. The journey to reach Clipperton took almost two additional days, and the landing challenges increased our delay to almost three days.

Changing plans

Our plan for two campsites was changed to a single campsite, in an effort to reduce the amount of equipment needed ashore and to get on the air sooner. Over the first few operating days, the remainder of the camp was assembled, giving us five operational stations.

Meals, drinking water and generator fuel were brought over by *Shogun's* crew, with supply runs timed for high tide during daylight hours. A total of 42 trips were made to transport people and

equipment. Breakfast foods were stored on the island and regularly replenished by the *Shogun*. Weather permitting, additional meals were brought ashore each day. Except for the last day, everyone stayed on the island for the duration of the DXpedition.

The campsite consisted of eight sleeping tents, a kitchen/dining building, an HF operating building, a dedicated EME/6M/satellite operating tent, and an HQ tent. The shelters included REI “Wonderland 6” tents for sleeping, the EME/Satellite station and for the HQ tent. The operating and dining buildings were multi-purpose structures marketed as portable automobile garages by Shelter Logic. The dining tent was equipped with two small refrigerators, a microwave oven, a toaster, water boiler, food storage bins, and tables/chairs. The operating building consisted of five radio operating positions which could accommodate any band/mode.

Based on information from the Internet and other people who had been to Clipperton, we expected to encounter a large presence of crabs, especially at night. We brought 600 feet of fencing to keep the crabs out of the camp; it wasn’t needed. While there were crabs, their numbers were so low that they were not a problem. One possible explanation could be the presence of rats on the island, and the theory that they decimated the crab population.

We’re happy to report there were no serious injuries; only some sunburn and several conditions treated by the team doctor, Arliss, W7XU. Dehydration was always a concern; we provided plenty of drinking water and a supply of Gatorade to restore electrolytes.

Radios and antennas

Each operating position had an

Elecraft radio — there were three K3s and two K4D transceivers. The amplifiers included two Elecraft KPA-500s, two Elecraft KPA-1500s, and one Flex PGXL.

The HF antennas were monoband vertical dipole arrays (VDAs), and vertical antennas for 40, 60, 80, and 160 Meters. We were close enough to the sea and the lagoon to achieve benefit from the saltwater amplifier effect. The 60M antenna was actually a 60/80M antenna, manually adjusted for each band when needed — designed and built by Dave, WD5COV.



The main operating tent.

The 160M antenna was the “Top Band Express,” also designed and built by Dave, WD5COV. While it was always windy, we had very few antenna problems. The signal reports and never-ending pileups were good indicators that the stations and antennas were performing well.

The generators were a Generac 6.5kW unit and several AI Power 4kW units. We had no equipment failures, although the equipment did get covered with sand and silt that blew through the HF tent. Subsequently, all the Elecraft equipment was returned to the factory for cleaning, refurbishing and calibration. The antenna filter and patch panel, designed and built by Walt, N6XG, provided the flexibility to connect any antenna to any radio.

Radio operations

The team’s 16 radio operators were divided into three teams of five radio operators per team, and the EME/Satellite/6M was operated almost exclusively by Andreas, N6NU.

Team staffing considered operator mode preferences and each team had a captain. On-shift operators agreed on bands/modes, and as propagation changed, the operators worked together to meet team goals. Based on pilot input and over-the-air comments we knew the DX community was happy with our strategy to follow the propagation.

The pilot team was communicating with us via Starlink. This was the second DXpedition in which we used a Groups.io account for the DX community to provide input and communicate with the pilots. That, too, worked well, with over 500 registered users, there was plenty of daily traffic.

The first contact was made 20 January on 17M CW with

NL7S, and the final contact was made 28 January on 40M SSB with NJ7G. We were delighted to find good propagation and reasonably strong signals to many parts of the world, not unexpected NA/SA being the best, followed by EU.

During periods of good propagation, all five operating positions were in action. As high-band propagation waned during the night, SSB usually dropped out first and operations would shift to FT8. The equipment plan included a rack of high-power bandpass filters manufactured by Low Band Systems (LBS). The combination of Elecraft radios and LBS filters proved to be very effective; we had very little interstation interference.

An important aspect of TX5S planning was operator scheduling. We

used the same schedule that was used on South Orkney Islands, VP8PJ. For each four-hour shift, operators were scheduled on the five stations, depending on expected band activity. Every few days, each of the teams would move their start time by four hours, thus over the project's duration each team experienced different geographic openings and band conditions.

EME/6M/Satellite activity

There was significant interest in EME, 6M and working through the Greencube satellite from Clipperton Island. During the 2018 VP6D DXpedition to Ducie Island, we made 28 6M EME QSOs. VP6D was the first time we included EME in a PDXG project. Andreas, N6NU, was the architect and station captain for these TX5S activities.

As Andreas writes, "How does one get to be the Satellite Captain for a major DXpedition? Satellite operators

and 6M EME groups had reached out to us about possible activity. When the DXpedition co-organizer Gene, K5GS, asked the team who has satellite equipment or some knowledge about it, I raised my hand. The result was: 'Great, you got it, it's your project!' After a discussion with the team co-leader Steve, W1SRD, the decision was made to dedicate 100% of my time to activate Satellites, EME for 6M and 23cm, as well as 6M tropo when the station was not pointed at the moon. This was now a full-time effort and not an afterthought anymore. We had to plan for a separate operating tent, generator, and fuel.

"Satellite operations on the island were a great success with 375 QSOs and 47 countries worked. The OZ9AA terminal software worked well and Jeff Schwartz, KIØKB, ended up being the ad hoc pilot for us staying in contact with the Facebook group. We managed to focus on some geographic areas during different passes and I would

like to thank the satellite community for standing by and allowing us to work the hard ones at the edges of the coverage areas.

"The first Moonrise operation yielded a handful of 6M EME Q65 QSOs. On the following day the second session brought a surprise. After working a few EME contacts the WSJT-X screen started to show many strong signals coming in directly via tropo. The band had opened, and we worked as many stations as we could to make use of the opening. The final EME count was 17 QSOs and three countries; however, over the next few days, we added 197 6M tropo QSOs and 13 countries to the log. The band was open to NA, SA, AF, ZL and VK.

"The last band to be set up was 23cm/1296 MHz. Due to the constant wind the 2.4m dish had to be converted from fabric to wire mesh. We made a total of 55 initial contacts in 17 countries.



The 6M EME antenna amidst the tents.

*Andreas Junge, N6NU,
works the EME/6M/satellite
operations.*



I want to thank Dave, K3EL, for helping on 6M and the satellite station, as well as Arliss, W7XU, working many 23cm QSO's."

Andreas wrote a more detailed report of his TX5S experience available on the [TX5S.net](https://www.tx5s.net) website.

TX5S statistics

Total QSOs made was 113,736. We were using a new version of WSJT-X and when propagation was strong it was not unusual to see us running 4 to 5 slots making 350 to 400 QSOs per hour. We had no problem with FT8 dupes, and the overall dupe rate was 2.9%. Until the last few days, the overall dupe rate hovered at 1.9%, the operators noted more SSB and CW dupes were occurring as the DXpedition close approached.

QSO distribution was: NA 48.1%, EU 29.4%, AS 17.8, SA 2.2% and AF 0.46% and OC 1.96%, with 23,810 unique call signs and 171 DXCC entities. *See tables on page 9 for additional details.*

The number of Not in Log/Busted Call inquiries we received was amazingly low, at only 268 inquiries. For 113,736 QSOs this is an unusually low number, a good indicator that the TX5S operators paid close attention to logging accuracy. Many of those inquiries indicated inexperience with logging, in general, and using LoTW.

Each morning we'd look at the N1MM+ graphs and see that we were making between the 3,445 QSOs on the first partial day on the air, to over 18,000 QSOs on the third day of operation. While averages don't always tell the story, we averaged an amazing 14,217 QSOs a day.

As with VP8PJ, it was interesting to see the popularity of FT8, not just amongst the callers, but also with the DXpedition operators; perhaps the chance to remove the headphones and relax was a welcome break from the adrenaline rush of working a pileup on the other modes.

During the voyage to Clipperton Island we operated as N6WM/MM,

there was no /MM operation on the return voyage.

Logs, live stream and Starlink

During the project planning phase Steve, W1SRD, contacted Starlink to confirm availability at Clipperton. In a written reply, coverage was confirmed. Our two Starlink terminals were online 24/7 while on the island. Team members were able to exchange emails with friends and family and/or use WiFi calling. Logging computers were Lenovo X-230 laptops running WSJT-X and N1MM+.

Both Club Log's live stream and the traditional daily log uploads to the MØURX's Bespoke OQRS application were used. To the user, Bespoke OQRS system looks similar to Club Log. However, the Bespoke system automates many of the QSL manager's backend manual tasks. For example, the TX5S website's donation process seamlessly integrates with Bespoke. This relieves the QSL manager and the DXpedition team from manually enter-

ing and managing donor information. Label printing and LoTW upload files are easily created with a few mouse clicks. Almost all manual tasks are automated, making the manager's job less time consuming, and QSL card addressing errors almost nonexistent.

The science team

The primary interest of the science team was to study the behavior of the rat population on the island. Using infrared camera and data recording instruments, they recorded data on rat movements at night. Another aspect of their study was an assessment of future uses for Clipperton Island. These three gentlemen blended well with the radio team, and for the most part did their work away from the radio operations.

Departure

A DXpedition team needs a departure plan. It begins by merging the team's plan with the skipper's departure schedule, and removing non-essential equipment from the island as soon as we determined it was no longer needed. Antennas would be gradually removed, and stations disassembled and packed for shipment. It's a process that typically begins about two to three days before the planned departure date; however, the actual departure depends on weather and sea conditions and the skipper provided regular weather forecasts. Our departure plan considered available daylight and high tides to transit the reef; while the skipper's plan

Date/Mode

| | CW | FT8 | PKT | Q65 | RTTY | SSB | Total QSOs |
|----------|-------|-------|-----|-----|------|-------|------------|
| 20240128 | 1,147 | 1,936 | 0 | 0 | 0 | 362 | 3,445 |
| 20240127 | 2,376 | 4,976 | 56 | 2 | 0 | 3,521 | 10,931 |
| 20240126 | 3,046 | 9,619 | 5 | 16 | 0 | 3,305 | 15,991 |
| 20240125 | 5,000 | 6,518 | 42 | 20 | 0 | 3,711 | 15,291 |
| 20240124 | 4,772 | 9,817 | 41 | 25 | 369 | 2,500 | 17,524 |
| 20240123 | 5,056 | 8,967 | 59 | 13 | 0 | 3,969 | 18,064 |
| 20240122 | 5,004 | 7,814 | 134 | 1 | 0 | 4,725 | 17,678 |
| 20240121 | 2,550 | 6,782 | 173 | 0 | 0 | 3,256 | 12,761 |
| 20240120 | 600 | 1,451 | 0 | 0 | 0 | 0 | 2,051 |

considered the sea conditions/forecast on the route to San Diego, and they weren't looking too good.

Based on a building weather front, the skipper established our departure date to be no later than 29 January, so on 27 January we began removing equipment and some team members from the island. The remaining operators made QSOs until our shutdown on the 28th. That morning's high tide allowed the team the additional operating time, but they also encountered a monsoon-like rainfall during the final take down. Once back aboard, it took several hours to store and secure all the equipment. Our 8-day transit to San Diego was very rough and we were greeted by more rain upon arrival in San Diego.

The *Shogun's* crew and helpers offloaded all our equipment into a

waiting truck for the next day's drive to northern California.

Corporate sponsors

We received support from manufacturers and distributors of Amateur Radio equipment: Elecraft loaned two K4D transceivers, and two KPA-1500 amplifiers; DX Engineering donated coax, connectors, tools, antenna parts, aluminum tubing and countless other accessories; Arlan Communications loaned eight RadioSport headsets; Bart Bzymek, SQ1K, designed and provided the TX5S clothing. The DX Store subsidized the cost of several shipping cases; MØURX United Radio QSL Management Service and ON5UR QSL Print Services subsidized the cost of QSL card production. The Daily DX by Bernie McClenny, W3UR, was a financial sponsor. Low Band Systems,

Continent/Band

| Band | 160 | 80 | 60 | 40 | 30 | 20 | 17 | 15 | 12 | 10 | 6 | 70cm | 23cm | Total QSOs | Total % |
|----------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|-----|------|------|------------|---------|
| Africa | 3 | 22 | 10 | 59 | 56 | 79 | 68 | 67 | 86 | 67 | 1 | 0 | 1 | 519 | 0.46% |
| Asia | 443 | 1,440 | 39 | 2,857 | 2,274 | 2,937 | 2,809 | 2,366 | 2,498 | 2,494 | 0 | 58 | 4 | 20,219 | 17.78% |
| Europe | 398 | 2,014 | 696 | 4,548 | 5,413 | 6,850 | 3,727 | 3,261 | 3,502 | 2,931 | 0 | 94 | 32 | 33,466 | 29.42% |
| North America | 1,651 | 3,559 | 909 | 4,820 | 4,494 | 8,437 | 6,874 | 7,570 | 8,223 | 7,757 | 117 | 328 | 21 | 54,760 | 48.15% |
| Oceania | 36 | 154 | 20 | 312 | 233 | 281 | 374 | 429 | 165 | 189 | 20 | 13 | 0 | 2,226 | 1.96% |
| South America | 26 | 91 | 26 | 274 | 225 | 300 | 277 | 388 | 359 | 465 | 86 | 19 | 0 | 2,536 | 2.23% |
| Not Determined | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 3 | 1 | 0 | 0 | 0 | 10 | 0.01% |
| Total OSOs | 2,557 | 7,280 | 1,700 | 12,870 | 12,696 | 18,886 | 14,130 | 14,083 | 14,836 | 13,904 | 224 | 512 | 58 | 113,736 | 100% |

Mode/Band

| Band | 160 | 80 | 60 | 40 | 30 | 20 | 17 | 15 | 12 | 10 | 6 | 70cm | 23cm | Total QSOs | Total % |
|------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|------|-------|-------|------------|---------|
| CW | 745 | 2,700 | 0 | 2,227 | 4,664 | 4,317 | 4,434 | 3,938 | 3,204 | 3,322 | 0 | 0 | 0 | 29,551 | 25.98% |
| FT8 | 1,812 | 4,580 | 1700 | 8,410 | 8,032 | 8,982 | 7,259 | 5,204 | 5,970 | 5,724 | 207 | 0 | 0 | 57,880 | 50.89% |
| PKT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 510 | 0 | 510 | 0.45% |
| Q65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 2 | 58 | 77 | 0.07% |
| RTTY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 369 | 0 | 0 | 0 | 0 | 0 | 369 | 0.32% |
| SSB | 0 | 0 | 0 | 2,233 | 0 | 5,587 | 2,437 | 4,572 | 5,662 | 4858 | 0 | 0 | 0 | 25,349 | 22.29% |
| Total OSOs | 2,557 | 7,280 | 1,700 | 12,870 | 12,696 | 18,886 | 14,130 | 14,083 | 14,836 | 13,904 | 224 | 512 | 58 | 113,736 | 100% |
| Total % | 2.25% | 6.4% | 1.49% | 11.32% | 11.16% | 16.61% | 12.42% | 12.38% | 13.04% | 12.22% | 0.2% | 0.45% | 0.05% | | 100% |

Spiderbeam, and Rig Expert supplied our previous projects with equipment used on Clipperton. The generosity and ongoing support of these manufacturers and distributors is greatly appreciated.

Acknowledgements

We would like to acknowledge the help and support of the organizations and individuals that contributed to Clipperton Island 2024. We appreciate the major financial sponsorship from: the Northern California DX Foundation (NCDXF), the German DX Foundation (GDXF), the International DX Association (INDEXA), the European DX Foundation (EUDXF), the UK DX Foundation, and the Clipperton DX Club for their very generous support,


and that of the many other clubs and foundations. Review the list of corporate and club/foundation sponsors at TX5S.net — they deserve your support.

Over 1,600 individual donations were processed through the website, including 73 Premier Donors (contributing \$200, or more) and over 1,700 DXers added a contribution to their QQRS confirmation request.

The on-island team was supported by many individuals and, in particular, we want to recognize our Chief Pilot Curtis Foote, WX4W, and his pilot team of Joe Aoki, JJ3PRT; Claudio Gimenez, PY2KP; Björn Dettmaring, ON9CFG; Alex Teimurazov, 4L5A; Andre Pretorius, V51B, and Luke Steele, VK3HJ. Managing the early donor program

was Doris Wong, KØBEE, and Tim Beaumont, MØURX, who processed your QSL confirmations and uploaded your LoTW confirmations.

Among the highlights of the project were giving many DXers an ATNO and/or band fills, logging the first FT8 and 60 Meter contacts from Clipperton Island, and working with a fantastic team of Amateur Radio operators and a wonderful support team. For several people in the log, TX5S was their first ever DXpedition contact. We must also recognize the *Shogun* crew who were as much a part of the project's success as the radio team.

Until the next time, thank you for your interest in TX5S Clipperton Island 2024. 

50 Years Ago A Blast From the Past

West Coast DX Bulletin published every week by the Marin County DX Group March 19, 1974

One of the local QRPers dropped by last week, fresh from duty watching for Streakers running the Golden Gate Bridge. "Nothing again today," he reported, "but while we were up there sitting on the cliff above the north tower, Charley asked me something that I thought rather strange. Charley asked 'Would you rather be young and stupid than old and wise?' What do you make of that?"

Son of a Gun, what could we say to that one? "What was your answer?," we asked; it always being a good way to deflect a sticky one with another question.

"Well," the QRPer went on, "I really wasn't aware that others might have noticed how I acquired wisdom with my years." We quickly changed the subject about this point for, as Albert would often say: "All things are relative to their own time frame."

It does seem that with more watching for Streakers, there are fewer calling "CQ DX" interminably on the bands. And perhaps the years will bring the wisdom to answer the queries of the QRPers.

Until wisdom arrives with age, \$10.50 brings you DX smarts for a full year by 1st Class mail... \$12.00 zooms it in with a rumble and a roar.

Trindade and Martim Vaz Islands, PRØT

Stephano Silva, PT2IC

Land ahoy — our first sighting of Trindade Island.

Background

THE TRINDADE AND MARTIM VAZ archipelago is located approximately 745 miles off the coast of mainland Brazil. It sits on the Vitória-Trindade volcanic mountain chain. The peaks of Trindade Island reach heights up to 1,970 feet, which result from the erosion of a large volcanic mountain that lies in the ocean floor, at a depth of 18,000 feet; volcanic activities ceased approximately 5,000 years ago.

To preserve this unique ecosystem, the archipelago was designated as a marine conservation area in 2018, triggering further access restrictions to the easternmost territories of Brazil.

The island can only be reached by sea, and access is normally restricted to researchers and military personnel. Any access requires permission from the Brazilian Navy. In our DXpedition, we relied upon the corvette *Caboclo*, an imperial-class military vessel manufactured in 1953. The primary purpose of

our sailing was to allow for the rotation of personnel on the island. On this occasion, four researchers were picked up, and another four were dropped off. Therefore, our trip could either be as short as three days, be extended, or be canceled if the ship was assigned for a more urgent mission.

Furthermore, the team was notified of the departure date only a month ahead, making the logistics even more challenging, given that only one of the three operators lived close to the port that the ship would sail from.

The Team

Roberto “Beto” Tourinho, PY6RT, filed for the necessary permits with the Brazilian Navy. Once they had been granted, Beto invited Stephano Silva, PT2IC, and Fabio Hoelz, PY1ZV, to form the core team. Other hams were invited to support the FT8 operations remotely, namely: Renato, PY8WW; Renner, PY7RP; Alex, PC3T/PY2SEX;

Paul, F6EXV; Florian, PB8DX; Oms, PY5EG; Fred, PY2XB; Luciano, PY5KD, and Ramon, PY6TS.

The Beginnings

On 9 November 2023, Fabio, PY1ZV, began his journey towards Salvador, from where we would sail two days later, heading to Trindade. In his luggage, he carried the necessary equipment for the SSB/CW station, including two K3 transceivers along with RF filters. Upon arrival, Fabio met with Beto, PY6RT. Shortly after, Stephano, PT2IC, also arrived in Salvador, bringing along the antennas to be used during the DXpedition, as well as the remote station radio, an IC-7300. On the night of 12 November, we boarded the *Caboclo*, marking the beginning of our journey.

The following morning, we set sail towards Trindade — a 4-day journey cruising approximately 10 knots per hour. The sea was extremely kind to us, and we didn’t encounter any major issues until we reached the island.

We spotted land on 15 November and as we approached the island, we were able to admire its natural beauty and to anticipate the future challenges of the landing. Landing was made by zodiac-type boats and, due to the risks involved in the process, was managed by the local sailors. In this operation, we didn’t face major issues either, except for an incident that caused one of our power supplies to get wet. We set foot on firm ground at 1846 UTC on 16 November.

The station and campsite

The campsite was planned so that interactions between stations were



From left: Fábio, PY1ZV; Stephano, PT2IC, and Beto, PY6RT



The corvette *Caboclo*.

minimized. The main camp (SSB/CW) was located approximately 0.3 miles from where the FT8 station was set up. Considering our short presence on the island, we opted to bring equipment only for two stations. One would be used by the on-site operators, while the other would be activated remotely. Additionally, we chose lightweight and quick-assembly antennas to maximize our time on the air as much as possible. The stations were set up as follows:

Main site SSB/CW — Rig: Elecraft K3; PA: SPE Expert 1.3K-FA; Antennas: SteppIR BigIR 10-40 Meters + 80 Meter dipole. Secondary site FT-8 — Rig: Icom IC-7300; Antennas: quarter-wave verticals for 12, 17 and 30 Meters; Starlink Internet; Software: MSHV and Anydesk.

On the air

Just 1½ hours after landing, the first signal was transmitted on 10 Meters. Beto, PY6RT, kicked off the SSB/CW operation at 2012 UTC with W7ZJ being first in the log. As daylight had come to an end, the second station (for remote operation) was set up on a temporary basis next to the main field. At 2023 UTC, Paul, F6EXV, operating remotely, logged KZ2I, marking the first ever QSO on this digital mode from the Trindade and Martim Vaz Islands.

The morning of 17 November, the remote station was relocated and the linear amplifier was set up at the main site, thus completing the assembly of both stations.

Given the short nature of our trip, combined with the very high demand

for this DXCC entity, the team agreed to focus on giving a new one to as many hams as possible. In practice, this meant that instead of activating all bands on FT8, we would focus on the two best bands in terms of propagation. VOACAP predictions suggested that 12

and 17 Meters would be open most of the time and, therefore, that they would be the better choice to achieve our goal. On the other hand, local operators would focus on 10, 15, 20 and 40 Meters.

During the operation, we revisited our decision to limit FT8 operations to 12 and 17 Meters, as we were not reaching our expected QSO rates during the night. Therefore, we set up the quarter-wave vertical antenna for 30 Meters.

The SSB/CW team carried out the operation in 3-hour shifts, divided among the operators.

Shortly before tearing down the SSB/CW station, the operators on-site decided to build a dipole for 80 Meters, thereby allowing approximately 200 hams in South America, North America, and Europe to contact PRØT on that band.

The remote station kept running until the very last moment and was disassembled only an hour before we boarded the zodiac that transported us back to the *Caboclo*. Once again, the vessel was our home for the following four days.

Technical issues

During the DXpedition, our real-time logging software, provided by Hampass, was subject to a cyber-attack. That led to Nataniel, PY3NT, remotely accessing the computers of both sites multiple

times. Hampass managed to fix the vulnerability exploited by the hackers.

Statistics

Over this 3½ day period, our team made 18,573 QSOs, with 9,614 unique stations. As a result, Trindade and Martim Vaz Islands fell from 16th to 36th on the DXCC most-wanted list. Table 1 shows the distribution of QSOs per mode and band.

Acknowledgements

Thank you to all those who contacted us. This endeavor was made by and for you!

Our special thanks go to the Brazilian Navy for allowing us to operate and for transporting us to this remote and challenging location.


Some of the hams who supported this DXpedition include: Julio, PP2BT; Alex, PY4AZ; Hamilton, PY6HD;

| Band | SSB | CW | FT8 | Total | Total % |
|-------|-------|-------|--------|--------|---------|
| 80 | 86 | 112 | 0 | 198 | 1.1% |
| 40 | 545 | 281 | 0 | 826 | 4.4% |
| 30 | 0 | 0 | 3,168 | 3,168 | 17.1% |
| 20 | 1,406 | 217 | 0 | 1,623 | 8.7% |
| 17 | 0 | 0 | 1,494 | 1,494 | 8.0% |
| 15 | 1,280 | 202 | 0 | 1,482 | 8.0% |
| 12 | 0 | 0 | 7,016 | 7,016 | 37.8% |
| 10 | 1,922 | 844 | 0 | 2,788 | 14.9% |
| Total | 5,239 | 1,656 | 11,678 | 18,573 | |

Alex, PY2WAS; Ricardo, PY1PL; Nilzo, PY6AWU; Pablo, PU1ACJ, and Philippe, PT2FM.

We would also like to extend our sincere thanks to our sponsors, both individuals and organizations, such as NCDXF. This operation would have been much more challenging without their support.

Group sponsors: NCDXF, 599 DX Association, DX Hogs, Twin City DX Association, Bahia DX Group, Hampass, Rio DX Group, Willamette Valley DX Club, FORDX, German DX Foundation, and Araucária DX Group.

It would have been impractical to list all individual sponsors in this article, but we are most thankful for their support, and you can see the full list at pr0t.com.br. 



Campsite view.

DXpedition to 702WX Socotra Island, Yemen 2024

Vladimír Ženčák, OK2WX

Socotra is an island in the Arabian Sea, about 230 km east of Cape Guardafui on the Horn of Africa and 350 km south of the Arabian Peninsula. It belongs to the Republic of Yemen, of which it is a province (or, more accurately, a governorate) that also includes the surrounding smaller islands (Abd al Kuri, Samha and Darsa) and cliffs, collectively called the Socotra Archipelago. The largest city and administration center is Hadibu. In 2008, the entire Socotra Archipelago became a UNESCO World Heritage Site.

Laying the groundwork

THE IDEA TO EMBARK ON A DXpedition to Yemen was preceded by extensive efforts to obtain a license in Somalia, which ultimately failed. All the recent DXpeditions were worked from Somaliland, which has its government and authorities in Nairobi, Kenya, or from Puntland, which is not recognized as part of Somalia by the international community.

After the sudden death of Pierre

Tromp, ZS1HF, in September 2023, with whom I had planned a DXpedition to Marion Island ZS8 in February 2024, I eventually settled on Socotra, in the Republic of Yemen, which is 44th on the list of most-wanted DXCC.

The advantage was that, unlike on the mainland, there is no war on Socotra; the disadvantage, it isn't recognized by the Czech Ministry of Foreign Affairs, which strongly advises against traveling to Socotra. The island

is on the Ministry's Red List, which means it's practically impossible to take out any travel insurance. I eventually managed to get underwritten (with many exemptions) thanks to help from my XYL Paula who works in the insurance industry.

When I finally obtained my license, after five months of hard persuasion of the Yemeni authorities, it was practically useless, as is the custom in developing countries. Instead of the full spectrum of Amateur Radio bands, I only got some of them, with a maximum output of 100 watts and many other restrictions. Eventually, I managed to obtain a license for all the standard Amateur bands with the exception of 30 Meters, which the Yemenis do not consider to be an Amateur band or a secondary band, and which was, despite all my efforts, ultimately rejected. I was successful in getting an authorization for the SPE Expert 1.3K-FA linear, without which operation on the lower bands wouldn't make much sense.

The wait for the final signature from the Director of the Ministry of Telecommunications and Information Technology took a while, even though I had a written promise that I would receive





Departing with 122 kg of luggage.

my license. I finally got the document during a DXpedition in Cameroon, and immediately applied for a LOTW certificate and recognition by ARRL.

Good things come in threes

As soon as I received my certificate, an announcement appeared in “breaking news.” Kenneth Opskar, LA7GIA, well-known from the Bouvet DXpeditions, was going on a DXpedition to an unnamed, rare country in very difficult conditions, with just tents and generators. One week later, it turned out that my premonition was right: Ken was faster and flew to Socotra together with Shani, HA5DDX. This was a blow to Dima, RA9USU, who had been planning to arrive in December 2023 and Ken beat him to it. Dima, who had already been there as a leader with the large international DXpedition 7O6T in 2012, and then as a single operator in 7O2A, took it hard. On 11 November, he, too, appeared on Socotra, so we had two DXpeditions working on the same island at the same time!

This was an unpleasant situation for me, mainly because of the sponsors who weren’t too keen on supporting a third DXpedition to the same place (albeit a rare one) in three months. But, because unlike Kenneth and Dima, I had the authorization to use the SPE Expert 1.3K-FA linear, I decided to focus my efforts more on 160, 80 and 40 Meters CW/SSB instead of the over-used FT8.

And I had a valuable plane ticket

that sells out many months in advance. There are no scheduled flights to Socotra, just a special charter from Abu Dhabi in the United Arab Emirates that flies twice a week. Tickets can only be purchased through a special agent who arranges your stay on Socotra, which must include a guide, as movement on the island without one is impossible.

Another peculiarity is that the Air Arabia charter flight limits baggage weight to 20 kg per person, with no overweight or cargo options available. I managed to achieve a miracle and, unlike Ken and Dima, was able to take two transceivers, the SPE Expert 1.3K-FA, a full-size antenna for 160M (18-meter quarter-wave vertical and 16 radials) and a SteppIR CrankIR together with a 5-band Spiderbeam and 10-meter ALU mast.

I have to give thanks to Tereza Homola who, together with her Yemeni partner, managed to arrange an exception directly with the Air Arabia’s CEO, who allowed me to take more than 100 kg of material to Socotra. By coincidence, I flew together with a British BBC TV crew who went to film the beauty of Socotra and carried lots of heavy equipment.

Another unexpected issue was that the luggage was not checked all the way to its final destination because this was a charter flight. So, I had to pick it up in Abu Dhabi and re-enter the transit area, which turned out to be quite a problem. First, for Customs reasons, and second, because I had a license issued in a country that had in recent years fired missiles at the Abu Dhabi airport. In the end, I managed to get all my suitcases and antennas on the plane to Socotra and landed on the morning of 23 January 2024.

On the ground

My team was already waiting to get me through Customs and load the luggage into a large Toyota SUV, which is the most common type of vehicle on Socotra due to the state of the local roads.

I spent the first day and night in the capital city of Hadibu (Hadiboh), which has about 10,000 inhabitants. There are

just two hotels in all of Hadibu, both quite removed from what a European would expect. After a brief sleep, interrupted by constant prayers from the loudspeakers at the local mosque starting at 0400, we left at dawn for my QTH: Aomak Beach on the south side of the island. Getting there meant crossing the Haggeher (Hajhir) mountain pass at almost 1,500 meters high, which also gave me the opportunity to see the native dragon blood trees, considered the national tree of Yemen.

After arriving at base camp, we started setting up tents, one for operating and one for sleeping. Accompanying me was a driver/cook and a guide. Because the temperatures and the UV index climb very high and physical exhaustion sets in quickly, after lunch, instead of working, we slept. Darkness

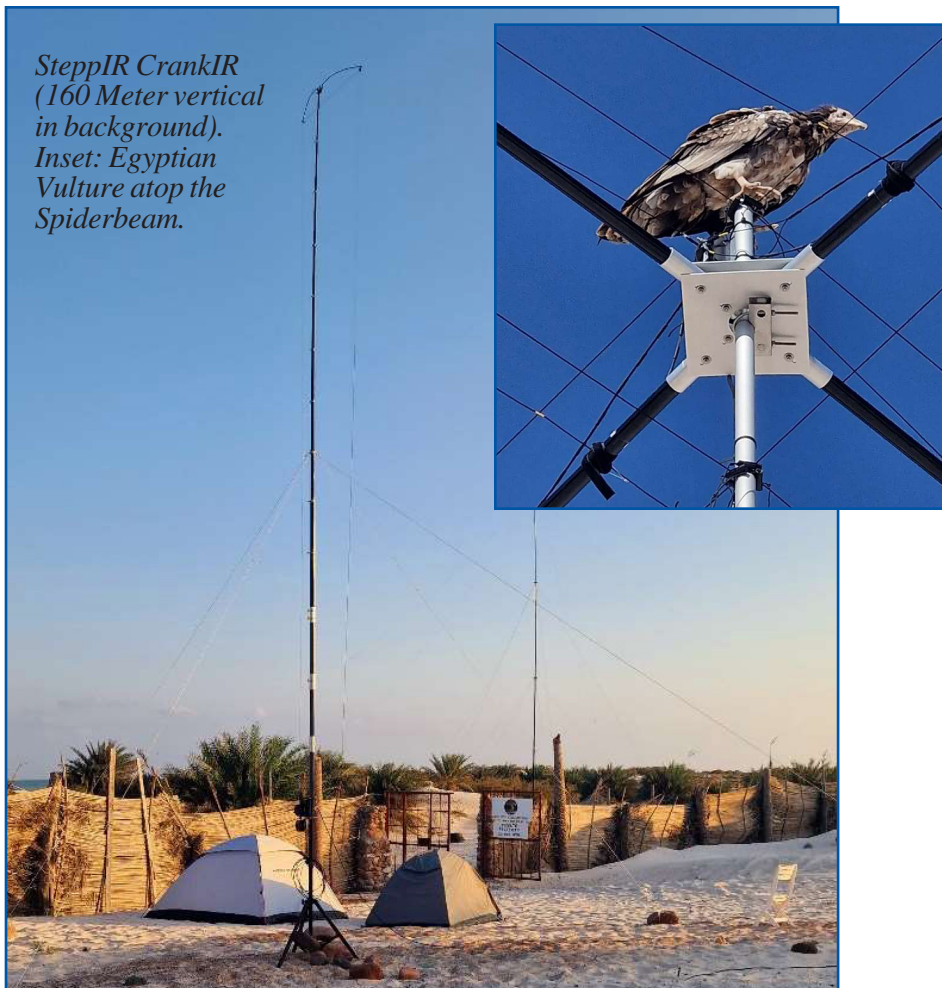


Dragon blood tree.

started setting in after 1700 hours, which meant that the amount of time for working outdoors was very short. It was only possible to set up antennas from dawn before 0600 to about 1000, and then from 1600 to dusk.

The following day, 25 January, I managed to set up the SteppIR CrankIR and commence operation at least on FT8. At the same time, I started to work on setting up the 18M vertical. In order to tune the capacitance hat, you need to take the antenna down, shorten the four elements of the hat, put it back up and re-anchor it in the wind — which is not

*SteppIR CrankIR
(160 Meter vertical
in background).
Inset: Egyptian
Vulture atop the
Spiderbeam.*



easy to do with only three people. Ultimately, we had to abandon the original idea of setting up the vertical on the beach, because instead of the expected 100-meter distance, it was almost 300 meters from our guarded area. There was an option to set up a large tent on the beach, but nowhere to put the generator. Even so, the coaxial cable for the vertical only ran to about 120 meters.

Contesting

On Saturday, 27 January, I took part in the planned CQ WW 160 Contest, not expecting anything to go wrong. After I managed to do just two QSOs in seven hours, I realized something was wrong. A test with OM7M showed that I wasn't audible anywhere, even though the PA read 1,200W out and the antenna's SWR was 1.15.

My first suspect was the antenna, which was attached to a wooden stake in the ground. The hairpin adjusting coil was leaning against a wooden stake hammered in the sand. I asked OK hams for advice and was told I should

attach the coil to fiberglass instead. I argued that in that case, I wouldn't be seeing a SWR of 1:1 and the antenna wouldn't be getting its 1200W.

It didn't help.

There was clearly no power being lost to the ground. It was an interesting situation. I had ideal SWR, full power to the antenna, but no connections. The voltage from the generator was a nice 225 volts, but when I measured the same voltage under load, keying the final stage, it dropped to 170 V. The Chinese 6kW generator with three sockets of 220 V, 1,800W each and one 400 V socket was unable to deliver even 600W of power to the PA. Already at 300W out, dots were dropping out during CW, and SSB was no longer intelligible. I suddenly realized why the other stations kept logging question marks in CQ WW 160 and were unable to read me.

This was of course a major problem. What to do?

As a precaution, my team delivered two brand new generators to Socotra,

with one serving as a backup. Of course, I couldn't just go to a store and buy a generator as if I were somewhere in Europe. The plane only brought medicine to Socotra; there was no way to get a functional generator from the Emirates on the double. I was already coming to terms with the fact that I'd do the whole expedition with just bare radio, like Kenneth and Dima, when Wael, the owner of the campsite, managed to secure a 3kW electric generator from a friend in Hadibu. He claimed it was totally reliable and could deliver 3kW, which turned out to be right.

All that was left was to set up the Spiderbeam and start working properly. On Monday 29 January, I finally appeared on the CW and SSB bands and the DXpedition was officially in business.

Dealing with the locals

My antennas, however, drew the ire of the local Egyptian Vulture (*Neophron percnopterus*), with a wingspan of almost two meters. Socotra happens to be the place with the highest population density of these endangered vultures in the world. One of them knocked down the SteppIR by sitting on it. "Fine," we said, "we'll just anchor it," and we did. Then the vulture set its sights on the Spiderbeam, landing on top of the balun and nibbling on the 15M dipole, which in the Spiderbeam consists of two parts. This soon had an effect, and my SWR on 15 Meters started to deteriorate.

In the meantime, I was experiencing tremendous pileups, as if no one was there two months earlier. In the morning, I rotated the Spiderbeam to 70° and, in addition to JA, also had a great signal with HS, YB, VU and VK. Before noon, I turned to EU where the pile-up continued until I closed on 10, 12 and 15 Meters. In the afternoon, W and VE stations joined in.

Soon I ran into another problem. Temperatures in the tent started approaching 40°C during the day, which meant that the end stage started to overheat and shut down. With a heavy heart, I decided to relocate my QTH to a stone shelter, 50 meters away. It took me half a day to reinstall everything, lead the coaxial cables again and put up completely new Beverage anten-

nas for the low bands. The shelter was nicely airy and pleasant to be in, but unfortunately it was quite open to the surrounding landscape. This turned out to be an issue later when the wind picked up and we experienced a sand-storm. When I returned home, I had to disassemble all the radios and blow the sand out with a compressor.

I was very disappointed with the 80M band for which I had the SteppIR CrankIR, pre-tested in OK with a 10-meter coaxial cable. My ham shack, however, was now 37 meters from the antenna. It turns out that with a 50-meter coaxial cable, the antenna has a completely different SWR than if you have a radio at its foot. In addition, the SWR started to deteriorate rapidly with longer keying. I contacted John, WA7IR, the CEO of SteppIR, who recommended I should include another balun on the path to the radio, but I didn't have one.

He said I should at least try a loop created from the coaxial cable near the antenna.

That didn't help.

Mirek, OK2BUH, an antenna expert, thought the coaxial cable was behaving as another radial and getting the antenna out of tune. Whichever it was, it meant I did not have an 80M antenna, which was a great pity.

I started to work at least on 40 Meter CW and SSB every evening. After dinner, I went to sleep for three hours and from 0100 local time until dawn I worked on 160 Meters, which was fantastic.

In high demand

Daily I received e-mails from American stations telling me that the entire Midwest and West was waiting to connect with Yemen on 160M. They were on the band every night from 2345 UTC until our dawn. Some large stations with a 160 4-square antenna, like KM2P from Maine, reached up to 599.

AA6AA asked me to avoid the frequencies 1810, 1820 and 1830, because commercial radio stations on the west coast of the USA generate harmonics on these frequencies, causing up to S9 interference and making reception impossible.

Because sand makes for poor grounding, I stretched out a few more radials near the terminal of the Beverage and impedance matching. This brought the SWR down to 1.1 and reception improved noticeably.

The vertical was behaving almost as if it were alive. The sand probably got wetter during the night tide, so the minimal SWR was moving around in a narrow band near 20 kHz. Before I

went to bed, I checked the minimum and saw it was 1815; at 0100, it was 1832. If even a single radial out of the 16 fell out, it had a noticeable impact on the minimum SWR value.

After daybreak, I switched the generator off for three hours, had breakfast, and went to bed so I could start working on 10 Meters from 0900 local time.

The band condition varied greatly — some mornings were completely quiet at first, but then there came a major pileup.

Wind also tended to pick up in the morning and reach more than 10 m/s, which made SSB operation virtually impossible, even with minimal VOX sensitivity. Later, I found a microphone with a classic PTT, but it was still better to switch to CW until the wind died down.

When this happened, I preferred to go on a stroll on the long and completely empty sandy beach to at least get in some exercise. After that, the sun was getting dangerous. By 1000 hours the UV index was already approaching 12.

Before the DXpedition, we did a quick survey to gauge interest in the individual bands on our website. We got about 500 responses, and the most popular results were 10, 40, 80 and 160 Meters; in terms of modes, people wanted CW, FT8 and SSB. That's why



Operating site.

I stayed on CW on 160 and 40 Meters throughout the night until dawn, and skipped the upper bands early in the morning.

Life passed in a regular rhythm: breakfast, lunch, dinner, broadcasting and sleeping in the tent — which I was constantly sweeping to get rid of the omnipresent fine sand. Unlike Kenneth, I had Internet access and could keep an online log. The connection was slow and unreliable, but good enough for text communication. Sometimes it dropped, and I was always glad when someone spotted me on a cluster, which was almost a necessity on the lower bands.

My team regularly went out to get fresh fish, prepared in a thousand variations with flatbread and legumes. They also brought in petrol for the generator, of which it consumed about 400 liters during the DXpedition.

Winding down

My last working day was the morning of 12 January. I underestimated how long the packing would take and we were disassembling the Spiderbeam in the dark. I would never have believed what fine desert sand can

do to antenna wires. The sand stuck to the elements so firmly that you could probably use them as a wire saw.

I left the antennas on Socotra, just like Dima left all his verticals and coaxial cables. Given that the cost of shipping is several thousand USD, it's cheaper to just write them off.

The night journey to Hadibu was, thankfully, without any nasty surprises. I returned to the same dirty hotel room with a bunk bed and a hole in the floor instead of a toilet. The next morning, I was supposed to be at the airport five hours in advance to check in my luggage. My team brought me to the closed airport early in the morning. Because flights only arrive twice a week, the airport is closed most of the time.

Thankfully, the owner of the base camp was also an airport employee, which made things much easier. Even so, the security guard wanted me to open the suitcases and disassemble the IC7300 to look inside. After a short discussion in Arabic, my guide managed to persuade him that it was not necessary.

All that was left was to get through the immigration checkpoint and onto


the plane to the UAE, and then to Qatar where I overnighted before boarding my Qatar Airways flight to Vienna.

The Yemeni odyssey was over. Despite all the troubles with the generator, the heat and the sand, I managed to make over 27,000 QSOs in two weeks, of which 10,300 were on CW/SSB.

My thanks

My biggest thanks go to the Yemeni-Czech couple, Wael and Tereza, who own an agency on Socotra Island and without their help, this DXpedition would never have taken place.

I also want to thank my corporate sponsors: Spiderbeam, SteppIR, Mast-Grant, Socotra Exclusive Tours, and Generali Česká pojišťovna. Foundation, association and club sponsors: NCDXF, GDXF, SDXF, EUDXF, Clipperton DX Club, INDEXA, North America DX Club, The Daily DX, DXpedition Trophy, DX-World and DXNEWS. Individual sponsors: IZ8CCW, KB8VAO, JF1QHQ, OK2VWX, N4II, OZ1ISZ, DM6MA, MØMDS, W6EAW, and others.

For more info, visit mdxc.support/7o2wx. 



Stephen F. Merchant, K6AW

ON 20 JANUARY 2024, NCDXF LOST A LONGTIME friend and director, Steve Merchant, K6AW, at the age of 82.

A veteran DXer, I first met Steve on the VP8ORK DXpedition in 2011. He previously had traveled to VK9LZ, HV4NAC, OHØR, EY3M and HC8N, where he was one of the team that built that large Galapagos Islands contest station.

Steve was an operator of many contest stations and was a WRTC 2002 referee and CQWW Contest Committee member.

When I first joined the NCDXF Board, Steve could be counted on as the technical eye when we vetted DXpedition grant requests. He served on our Board from 2002 until 2018, adding his insight into hundreds of grant applications. Even after he left our Board he was often called upon for his historical knowledge and know-how.

He will be sorely missed.

~ Don Greenbaum, N1DG



At the 2016 Visalia NCDXF booth: (back row, from left) Glenn Johnson, WØGJ; John Miller, K6MM, and Doug Bender, WW6D. (Front row) Steve Merchant, K6AW and Don Greenbaum, N1DG.

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| Ball cap | \$12 | | \$ |
| Knit beanie | \$25 | | \$ |
| Lapel pin | \$10 | | \$ |
| Roll of 500 labels | \$10 | | \$ |
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Mail your completed order form to NCDXF, PO Box 2012, Cupertino, CA 95015-2012



W8S — an International DXpedition to Swains Island

Adrian Ciuperca, KO8SCA

“What do you expect to find there? Well, if I knew, I wouldn’t go there!” ~ *Jean Jacques Cousteau*

ON 7 OCTOBER 2023, A GROUP OF 10 international ham operators from Germany, the Netherlands, and USA landed on Swains Island and set up camp for about two weeks for the purpose of activating this rare DX entity with the call sign, W8S.

Island background

Swains Island is an uninhabited coral atoll in the South Pacific Ocean, located about 200 miles north of American Samoa. It is about 0.5 square miles in size and it is a USA territory.

The island, about 15 feet high with a circumference of about four miles, is covered by coconut trees and shrubs and has an enclosed lagoon with brackish water.

Jean-Michel Cousteau, the son of

the famous French explorer Jacques Cousteau, was enamored with Swains Island and its pristine beauty. In 2014, he created the well-received documentary film entitled: “Swains Island: One of the Last Jewels of the Planet.”

Although the marine areas adjacent to Swains Island have been incorporated into the National Marine Sanctuary of American Samoa (NMSAS) as a sanctuary unit, a lesser-known fact is that Swains is a private island owned by the Jennings family.

The history is a bit hazy, but the story goes like this: An American, Eli Jennings, joined the copra (inside meat of the coconut) farmers on Swains Island with his Samoan wife in 1856.

It is said that he purchased the island from a British Captain Turnbull,

for 15 shillings per acre, plus a bottle of gin. So, if Swains was calculated to be 373 acres, the total paid would have been 5,595 shillings. That would be about \$40,000 at today’s value, plus... a bottle of gin.

Alex Jennings is the current owner of Swains Island, and he provided the logistical support for the W8S DXpedition.

To reach the island, the team flew to Hawaii and onto Pago Pago, American Samoa. From Pago Pago, the team loaded their equipment on board the chartered 138-foot vessel, *Manu’atele* and sailed for about 48 hours to reach Swains.

Swains and ham radio

Prior to the W8S DXpedition, Swains Island, KH8/S, was number 27 on the Most Wanted Club Log DXCC entity list. At the time of this writing, after the DXpedition had ended, Swains Island is listed at number 51. Swains Island became part of the DXCC program in 2006 when a team led by Kan Mizoguchi, JA1BK, made 16,390 contacts with the call sign KH8SI.

Prior activations of Swains Island include: W5BOS/KH8, 560 QSOs (1994); KM9D/KH8 (2002); KH8SI [did not count for DXCC] (2005); KH8SI, 16,390 QSOs (2006); N8S, 117,205 QSOs — a world record at



Equipment boxes ready for shipping from the Netherlands to Pago Pago.

the time (2007), and NH8S, 105,455 QSOs (2012).

In addition to DXCC, Swains is also part of multiple other Amateur Radio programs such as IOTA OC-200 (Islands on the Air), POTA K-9754 (Parks on the Air) and KFF-6575 (World Fauna and Flora).

The W8S project

After many years of preparations, as well as setbacks — a measles outbreak in American Samoa, a defective vessel that needed extensive repairs, and the COVID pandemic — team leader Hans Griessl, DL6JGN, and co-leader Ronald Stuy, PA3EWP, were finally able, in October 2023, to take the team to Swains Island for an adventure of a lifetime.

Unfortunately, after the team arrived in American Samoa, we were told our project would be delayed once more, for at least a week or maybe two, due to the vessel's schedule changes. A large tropical storm had just passed over the area prior to our arrival and so, our vessel, which has the important task of supplying the communities spread over the multiple islands of American Samoa, had to give priority to servicing those communities.

We pleaded our case to the vessel captain, we were interviewed by the



Our ride to Swains Island, the vessel Manu'atele.

local radio station, and we contacted the local government. Soon enough the whole island was aware of our situation and the old adage of “if there is a will, there is a way” applied here and the Port Authority was able to adjust the vessel's

was shipped to American Samoa by UPS from the Netherlands, some was brought by the team members on their flights to American Samoa, while heavier items (such as steel masts, hammers, etc.) were purchased by the team in Pago Pago.



One ton of equipment was unloaded onto Swains Island.

schedule to help us reduce the departure delay to only three days.

Getting set up

Nearly a ton of equipment was unloaded on Swains Island. Some

The team set up two separate radio camps (named “Red” and “Blue”), about 1,500 feet apart, to allow for simultaneous CW and SSB operation on the same band. The radio camps ran pileups 24/7 using six stations on CW,

SSB, RTTY and FT8. A separate camp for sleeping tents and the kitchen area was set up by the support team brought on the island by Alex Jennings.

Swains Island had never been activated on EME and the demand was high. So, the W8S team set up an additional station dedicated for 6M with EME capabilities using a Flex 6700 radio and the popular M2 6M8GJ, an 8-element 6M DXpedition EME antenna with 12dBd gain. We transmitted on 50.190 MHz using the new WSJT Q65-60A pileup mode in the first sequence.

For FT8 we used the latest version of the WSJT-X software and operated only in the Fox-and-Hound mode. The team posted the operating plan on their website (swains2020.ildxt.eu/operating-plan) prior to the DXpedition.



The landing craft on approach to Swains Island.



Our Green, Red and Blue camp setup.

Equipment

The team used Elecraft K3S radios, SPE Expert 1.3K-FA amplifiers, and 4O3A High Power bandpass filters/triplexers — a winning combination that is very popular with the DXpedition teams.

DX Engineering, probably the most well-known ham radio store in the world, provided the W8S team with a beam for terrestrial 6M operations, high quality coaxial cable, MIX 31 ferrites, and telescoping masts.

The German company RF-KIT provided W8S with two of their popular RF2K-S 2KW amplifiers and those came in handy to the W8S team in their goal of reaching the small pistol stations around the world, who attempted to make an ATNO QSO with a limited setup.

Myriad antennas were installed on the island to cover all the HF bands: VDA antennas for the 10/12/15/17/20 and 30 Meter bands, Hexbeam for 10/15/20 Meters, phased verticals for 40 Meters, T-loaded vertical for 160 Meters, and a vertical for 80 and 60 Meters.

Electricity for the radio shack and the camp was provided by multiple 6kW Generac GP5000 gas-powered generators.

Prior to the DXpedition, the W8S team met in the Netherlands to assemble, test and pack the antennas for the DXpedition to ensure that all

components would work well on the island. That approach paid off as the antenna installation on the island took place without any issues.

For the curious readers, detailed station diagrams of the two radio operating camps as well as many antenna pictures are available on our [website](#).

Although the images of the island show a tropical idyllic place, the reality is a bit different. Temperatures hovering around 104°F (40°C) with high humidity and mosquitos, which seem to be the main inhabitants of the island,

made living conditions on the island particularly difficult. Building the stations required a great deal of effort from the entire team. This is also one of the reasons why the construction of the stations took a little longer than we hoped.

The team set up a StarLink terminal on the island, which provided a good quality high-speed Internet connection and allowed us to make daily uploads to Club Log. In addition, the team was able to broadcast, for the first time ever in a DXpedition, live images from Swains Island and participated in a live YouTube broadcast hosted by DX Engineering. Viewers were able to see an operator's screen and hear the audio signals, which allowed operators around the world to see and hear in real-time, how it feels to run pileups and operate from a DXpedition.

The end result of the W8S DXpedition was a whopping 92,000 QSOs in the log with about 22,000 unique call signs. This was a bit short of our goal of 100,000 QSOs (a result of our delayed arrival). More importantly, due to extensive efforts from the team, the QSOs were equally distributed among the ham radio population around the world, significantly increasing the number of ATNOs (All Time New Ones).

QSO confirmations

For QSL card confirmations, the team chose the well-known QSL



VDAs, Hexbeam and 8-element 6M beam antennas on the beach.



(Left) Antenna and tent setup at Red radio camp. Right: W8S radio shack with Elecraft K3, Expert Amp and 403A filters.

manager, Charles, MØOXO (www.m0oxo.com) to take on the extensive QSL and LoTW managing chores for the W8S operation. If you worked W8S

PA5X, and Gerben Menting, PG5M.

Rainer, DL2AMD, was also the team doctor, in charge of the well-being of the team while on the island.

We also had an experienced team of radio pilots who passed messages and feedback to the island radio team from the worldwide ham radio community, in real time, improving the ability of the island team to reach larger parts of the world.

The W8S pilot team was made up of: Alex Hengel, PA1AW; Jan Foerderer, DL7JAN; John Warburton, G4IRN; Steve Hass, N2AJ; Siso Hennessey, HK3W; Champ Muangamphun, E21EIC, and Lee Moyle, VK3GK.

Our thanks

We would like to thank all the hams, clubs, organizations (especially NCDXF, GDXF, EUDXF and INDEXA) and corporations (especially DX Engineering and RF-KIT) who supported us in this expensive endeavor! The W8S team appreciates your support!

The W8S DXpedition website www.swains2023.com as well as the [Facebook page](#) and X (Twitter) @Swains2023 contain the latest news and additional details and pictures about this complex project.



The Green camp served as our kitchen, bathroom and sleeping camp.

and requested a QSL card, by the time you read this, you should already have the QSL card in your hand.

The W8S team

The 10-member team with extensive DXpeditioning skills was made up of the following operators: Hans, DL6JGN; Ronald, PA3EWP; Heye Harms, DJ9RR; Rainer Schinkmann, DL2AMD; Adrian Ciuperca, KO8SCA; Max George, NG7M; Evert Bakker, PA2KW; Martin Jonink, PA4WM; Johannes Hafkenscheid,

W8S team members were interviewed by a local radio station on American Samoa.





Tristan da Cunha, ZD9W

Yuris Petersons, YL2GM

A rough start

PLANS TO VISIT TRISTAN DA CUNHA Island (ZD9) were first set in 2018. Initially it was planned to visit ZD9 with a four-operator team. However, a few weeks before starting our trip we were informed by an island representative that there wouldn't be any available berths for us on the ship. The regulations say that the first priority for berths on the ship is for islanders, followed by their relatives, then officials, and, lastly, tourists.

After this came COVID, and the

island was closed to visitors. All restrictions were lifted in spring 2023 and I immediately started to communicate with the island administration. The opportunity came up to go, however, this time I decided to go alone because the chances to get berths for more operators were low. I was offered a berth on the cargo ship *MV Lance* scheduled to leave Cape Town, South Africa, on 15 September 2023, with a return planned aboard the fishing vessel *MFV Edinburg* on 24 October.



Departures

On Monday, 11 September, I flew to Cape Town, South Africa. I had an extra bag of gear with me, which did make it difficult to change terminals in Frankfurt. Once I landed in Cape Town, I settled into a hotel and rented a car to visit a friend, where I picked up my antenna bag with the Spiderbeam, LBS vertical, and cables I had left with him during my previous visits.

The departure of *MV Lance* was planned for 15 September, but the day before I took all my bags with equipment to the ferry station, and in the morning the shuttle bus took me to the port. Upon boarding, everyone was shown to their individual cabins and the ship left port as planned.

That afternoon we were invited to lunch and introduced to the captain, followed by a ship's tour of the great cabin, ship deck, engine deck and storage spaces. We had any questions



*The cargo ship
MV Lance.*

answered and also received the required training regarding ship security.

During the trip I acquainted myself with Oleg, the ship's captain. Originally from Kaliningrad, Russia, he has managed to assemble an international ship crew that runs like a watch. I want to give a special shout out to the ship's Indonesian chef, who prepared three daily meals for the 18-member crew and its passengers — all served with plenty of variety and imagination. Any restaurant would be grateful to have him as a chef.

The initial plan was to reach Tristan on 22 September, however, the captain informed us that the weather conditions were getting worse and, in a best-case scenario, we would reach our destination by 26 September. In addition, our ability to disembark would depend heavily on the local island weather.

On board, Internet was only available every second day for one hour, and only for text messaging — no pictures or videos were allowed. However, that was enough time to inform our families that we were safe.

After rough sailing through high winds and waves, we finally saw the contours of Tristan da Cunha on the evening of 27 September. When we reached the island, it was in complete darkness. The next morning the weather was bad, so we had to spend another day on board. The following



First sight of Tristan da Cunha through cloudy skies.

day around noon, a barge arrived to take us ashore.

Arrival

Locals and island administration kindly welcomed us and showed us to our homes. In my assigned guesthouse, there was little space available for antennas as the house was close to other yards and local roads. Nevertheless, I set up a small vertical for FT8 and turned on the station.

My first DXpedition QSO was made with JE1RMI on 21 MHz at 1525 UTC.

Then it started to rain, and the wind was getting stronger. There was no Internet at the guesthouse, so I had to go to the town center where the Internet station and its antennas were located. After receiving login credentials, I was finally able to contact my home.

During the night, weather conditions got worse and when the morning came, I saw that my vertical had broken in half. Fortunately, however, the upper bands were still operational.

After the rain stopped, I had time to fix the antenna, but that afternoon



The result of antennas battling high winds: Spiderbeam (left) and LBS vertical.



Imagine my surprise to find cows entangled in the Spiderbeam wires.

the rain and high winds returned. The weather forecasted 100 mph winds so I decided to take down the antenna before the wind broke it again.

By the time Sunday morning arrived, the storm had passed and I could return to operating.

Operations

On Tuesday, I went to the tourism administration to ask about finding a different location that would be more suited for my activities. We found a solution in the kindergarten building, which had a place for antennas and a clear horizon in the main directions for NA, EU and AS — it was ideal. Kindergarten was in session five days a week from morning until 1500 hours. For lunch and dinner, I returned to my guesthouse where meals were prepared by the hosts.

Over the next three days the weather forecast was ideal, so I started with setting up the LBS 18M vertical for low bands that was located inside the fence perimeter and its 20-meter radials didn't trouble anyone. This was followed by the Spiderbeam and 6M antennas that were placed closer to the station. Antennas for this DXpedition were prepared so I could set them up alone without help from others.

At that point, I could have said that

the station was ready and all that remained is just to operate. However, my work with the antennas didn't stop there.

On Friday, 11 October, the wind gusts got stronger during midday. With high difficulties I managed to lower the Spiderbeam and LBS vertical. The antennas remained lowered the following day, but just before dark

I raised the LBS vertical to work EU and JA on 80M CW. I was planning to do the same on low bands for the following night, but the winds just got stronger. This continued for a week and during these days I lowered and fixed the LBS vertical three times and also had a similar situation with the Spiderbeam. The 6M Yagi was beyond repairs.

Early on the morning of 21 October, while still dark, the SPE power amplifier switched off several times. It turned out that the antenna field got visited by cows and a calf became tangled in the Spiderbeam guy wires; my last hopes to fix this antenna were gone with freeing it. The final DXpedition days were worked only with the DX Commander and LBS vertical.

Initially, my goal was to make 60,000 QSOs so it would qualify for a new Single Op record. However, on 17 October, when I reached that milestone, my friend Girts, YL2KL, encouraged me to go for 70,000 QSOs. The number 70 was also special because of my upcoming 70th birthday. Doing this was tough but in the end, I managed to reach this result on Sunday evening 2027Z by making the last 70,112 QSO on 7 MHz CW with CQØDX. In the darkness, I took down the DX Commander and packed my gear.



Yuris operating from his Tristan da Cunha shack.

Continent by Band

| Band | 160 | 80 | 60 | 40 | 30 | 20 | 17 | 15 | 12 | 10 | 6 | Total | Total % |
|---------------|--------------|--------------|----------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|-----------|---------------|-------------|
| AF | 9 | 25 | 0 | 64 | 51 | 63 | 60 | 90 | 89 | 101 | 0 | 552 | 0.8% |
| AN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| AS | 32 | 409 | 0 | 2,160 | 2,318 | 2,150 | 1,600 | 1,704 | 1,189 | 1,276 | 0 | 12,838 | 18.3% |
| EU | 980 | 1,448 | 0 | 3,425 | 3,011 | 3,462 | 4,007 | 5,143 | 5,797 | 7,968 | 14 | 35,255 | 50.3% |
| NA | 448 | 726 | 0 | 2,728 | 2,042 | 2,579 | 2,171 | 2,232 | 2,232 | 3,264 | 0 | 18,422 | 26.3% |
| OC | 0 | 5 | 0 | 124 | 106 | 129 | 80 | 119 | 64 | 64 | 0 | 691 | 1.0% |
| SA | 51 | 154 | 0 | 382 | 204 | 309 | 217 | 355 | 298 | 384 | 0 | 2,354 | 3.4% |
| Totals | 1,520 | 2,767 | 0 | 8,883 | 7,732 | 8,692 | 8,135 | 9,643 | 9,669 | 13,057 | 14 | 70,112 | 100% |

Continent by Mode

| Band | CW | FT8 | SSB | Total | Total % |
|---------------|--------------|---------------|--------------|---------------|---------------|
| AF | 84 | 408 | 60 | 552 | 0.8% |
| AN | 0 | 0 | 0 | 0 | 0.0% |
| AS | 857 | 11,921 | 60 | 12,838 | 18.3% |
| EU | 4,411 | 29,019 | 1,825 | 35,255 | 50.3% |
| NA | 2,175 | 15,434 | 813 | 18,422 | 26.3% |
| OC | 26 | 664 | 1 | 691 | 1.0% |
| SA | 333 | 1,892 | 129 | 2,354 | 3.4% |
| Totals | 7,886 | 59,338 | 2,888 | 70,112 | 100.0% |

Band/Mode Breakdown

| Band | CW | FT8 | SSB | Total | Total % |
|---------------|--------------|---------------|--------------|---------------|---------------|
| 160 | 114 | 1,406 | 0 | 1,520 | 2.2% |
| 80 | 283 | 2,484 | 0 | 2,767 | 3.9% |
| 60 | 0 | 0 | 0 | 0 | 0.0% |
| 40 | 1,195 | 7,680 | 8 | 8,883 | 12.7% |
| 30 | 571 | 7,161 | 0 | 7,732 | 11.0% |
| 20 | 490 | 7,696 | 506 | 8,692 | 12.4% |
| 17 | 312 | 7,566 | 257 | 8,135 | 11.6% |
| 15 | 1,183 | 7,926 | 534 | 9,643 | 13.8% |
| 12 | 1,314 | 7,724 | 631 | 9,669 | 13.8% |
| 10 | 2,424 | 9,681 | 952 | 13,057 | 18.6% |
| 6 | 0 | 14 | 0 | 14 | 0.0% |
| Totals | 7,886 | 59,338 | 2,888 | 70,112 | 100.0% |

Heading home

Although the *Edinburgh* arrived on Friday, weather conditions wouldn't permit passengers to disembark until Monday.

After finishing all formalities in the immigration and tourism office, it was time for boarding and departure. Initially, our sailing was planned for seven days but weather conditions ex-

tended it to nine.

Upon disembarking in Cape Town, I drove to the airport and, after a couple of flights, I was greeted by my loving wife at the Riga airport.

For that DXpedition I was away from home for over six weeks, but I

had a week to recover before I was off to the next one: VK9XY and VK9CY.

Thanks to all my supporters and family.

For more info, visit lral.lv/zd9w 🌐



Antennas and the free horizon.

Marquesas Islands, TX7L

Didier Cadot, F6BCW, and John Trummer, F5VHQ

The preparation

A DXpedition below the equator, in the center of the South Pacific, far from everything, requires high-performance long path (LP)/short path (SP) switchable antennas, which favor an ionospheric path with the lowest possible attenuation. The particularly steep aspect of the Marquesas, very dense equatorial vegetation, and the easterly trade winds, which blow constantly — sometimes strongly — complicate the choice, manufacture, and installation of antennas. A comprehensive study was carried out upstream, leading to the construction of specific antennas and purchase of a commercial antenna.

Our 16-member team was made up of 60% experienced DXpedition operators and 40% novices. This situation favors the transmission of knowledge and experience from the “elderly” to the “younger.” The team had nine operators in the Marquesas and seven in support.

Getting there

Six days of round-trip travel were necessary between our homes and the island of Hiva Oa.

On November 2, 2023, the team was in full force in Tahiti, leaving for the Marquesas the next day, arriving at their destination at 2 p.m. local time. Tired from the trip and a 12-hour time difference, but happy to have arrived in Te Fenua Enata, the “Land of Men.” The team was ready!

With us, we brought 600kg of equipment for the four stations, including 12 antennas and 700 meters of cables. Everything was packaged in 27 hold suitcases. For the return, however, we had a crate made to hold 60% of our equipment, which was returned by sea freight; the rest flew back with us.

Operations

Two cumulative days of work were necessary to install the four stations and 12 antennas. The 60 to 10 Meter bands were activated on the evening of 4 November, and the following day, the 80M antenna was ready. On 7 Nov the 6



Meter operation started and, finally, on 8 Nov we could start on 160 Meters. It was a lot of work to weed, clear brush, and install our antennas on two hectares of land with a 45-meter drop. In the Marquesas, certain lianas (woody tree-climbing plants) grow two meters per month.

At the beginning of the DXpedition, traffic was immediately in full swing with a high solar flux index (SFI) allowing SP and LP QSOs on all bands from 40 to 10 Meters. Subsequently, the SFI was lower and several solar flares significantly disrupted operating conditions for 72 hours.

The operators

noted certain remarkable points of radio conditions with Europe and with the east coast of North America. There was a wealth of pileups, which were always full as soon as the call sign was spotted. Deep and fast QSB (2 to 3 seconds) dominated on 12 and 10 Meters. We experienced QSB flickering 30% of the time on the 15, 17, 20 and 30 Meter bands. Rapid reversals of the propagation paths with Europe went from SP to LP, or from LP to SP, in three



minutes on 10, 15, 17 and 20 Meters. We also experience signal strength that remained weak at S5 or less for 80% of the openings.

Notable points worth mentioning:

- We had no hardware failures and experienced excellent operation of our local network (LAN).
- Our website was a success with more than 106,500 visits.

Some weaknesses the team noted



include having only three QSOs on 160 Meters (there was great silence on this band); 80 Meters had few openings and allowed only 1,000 QSOs, mainly on FT8; we were only able to make digital QSOs on 60 Meters, and three big solar flares caused us to lose three days of operating.

Wrap up

The DXpedition made 55,000 QSOs including 44% on CW, 24% on SSB, 31% on Data, and 1% on 10 Meter FM with USA stations.

We will always appreciate the kindness and goodwill of the Marquesans, including the remarkable welcome by Tania, our hostess; her son, Pierrick, who helped us whenever possible, and Victorine, Tania's mother and a retired nurse, who cared for Jacques Brel.

This was an extraordinary adventure, and the team is ready for their next DXpedition to another DXCC entity in the South Pacific in 2025. There the team will focus on the low bands, but without neglecting the high bands and 6 Meters.

Our thanks

First of all, a big "Thank you" to the 25 foundations and amateur radio clubs, the 13 private sponsors, and our 150 individual donors who supported us.

Thanks to the remote team for their unflinching support with our website, Club Log, monitoring of radio traffic, dissemination of information on networks, and QSL Manager.

Thanks also to our families who allowed nine operators to participate in TX7L.

Thank you also to all radio amateurs for your "Ham spirit" always present on the air and which largely dominated during the operation. Thank you for your emails of support and encouragement, it was good for morale. Thank

you to the elders of the DXpedition for having passed on with kindness, experience, and knowledge, to the youngest who have become successful DXpedition operators in pileups.

The whole team joins us in sending you our 73s and our hope to see you soon for other DX adventures.

For more info, visit tx7l.com



We hosted a successful "open house" organized with two Hiva Oa colleges. Two groups of students and their teachers spent several hours among the operators who were delighted to talk about their passion and show radio communication.

We answered dozens of questions from the students, and one of the teachers, who was also a journalist, produced a report that was broadcast on their local news channel.

Cycle 25 Fund & Cycle 25 Society



To help supplement NCDXF's mission to provide necessary financial support for well-organized DXpeditions to rare and financially demanding DXCC entities, NCDXF established the Cycle 25 Fund in 2016. The goal of the Cycle 25 Fund is to double NCDXF's endowment through significant estate gifts from current DXers, which will allow NCDXF to continue its mission throughout sunspot Cycle 25 and beyond.

NCDXF Vice President, Craig

Thompson, K9CT, who oversees the Cycle 25 Fund, has established a Cycle 25 Society for those who participate. Thompson said, "The Cycle 25 Society is for honoring those special individuals who commit to estate giving before the next sunspot maximum. When you let us know your plans, we will honor you on our website and send you a special Cycle 25 Society pin as a memento of your thoughtfulness."

Since the announcement of the Fund, the following individuals have made estate-planning commitments:

| | |
|---------------------------|-------------------------|
| Tom Berson, ND2T | Ed Muns, WØYK |
| Al Burnham, K6RIM | Alan Rovner, K7AR |
| Bruce Butler, W6OSP (sk) | Bob Schmieder, KK6EK |
| Rusty Epps, W6OAT | Rich Seifert, KE1B |
| Ross Forbes, K6GFJ | Charles Spetnagel, W6KK |
| John Grimm, KØYQ | Ned Stearns, AA7A |
| Rich Haendel, W3ACO | Randy Stegemeyer, W7HR |
| Glenn Johnson, WØGJ | Craig Thompson, K9CT |
| Hardy Landskov, N7RT (sk) | Dan White, W5DNT |


Craig invites DXers interested in the Cycle 25 Society to visit the NCDXF website ncdxf.org/pages/estate.html for more information. You can also contact Craig to discuss Cycle 25 Fund funding

DXPEDITION LENDING LIBRARY

NCDXF has a number of VHS/DVD videos and Microsoft® Power Point presentations on CD-ROM available for loan to organizations

wishing to show them at their meetings. There is no charge to use the programs in the FOUNDATION's library, but clubs borrowing materials are responsible for postage in both directions. To view the complete listing of programs available for your club's use, visit our website, ncdxf.org, and click on "Videos."



options, including specific bequests, designation of IRA beneficiaries and purchase of an annuity or life insurance. 

CONTRIBUTIONS

NCDXF relies heavily upon the generosity of its contributors to fund various projects. We ask you to consider making an annual contribution of US\$50 or its equivalent in foreign currency. However, we do not wish to exclude anyone from the FOUNDATION for financial reasons. If \$50 is not within your budget, then please give what other amount you can. Naturally, we welcome contributions in excess of \$50! NCDXF is an organization described in Section 501(c)(3) of the Internal Revenue Code and all contributions are tax-deductible to the extent permitted by law for U.S. taxpayers. Send your contribution to: NCDXF, P.O. Box 2012, Cupertino, CA 95015-2012, USA. You may also contribute and order supplies online via our secure server, visit ncdxf.org/donate.

Qualified Charitable Distribution (QCD)

ARE YOU 70½ YEARS OLD OR OLDER?

If you donate to charities, then you can save on your taxes.

The IRS issued a press release in November 2022 stating that you can use a Qualified Charitable Distribution (QCD) from your IRA to save on taxes.

All of us at this age can or must take a distribution each year from our IRA or 401(k) plans. Take a look at the distribution form from your plan trustee and you will see that there is a way to have your plan trustee send the distribution to selected charities or 501(c)(3) entities. If you meet the age where a Required Minimum Distribution (RMD) must be taken each

year, this election qualifies as your RMD and, because you are sending the money directly to the charity, no taxes are withheld! Check with your tax advisor about which method is best for you.

NCDXF is a qualified 501(c)(3) organization and you can send money directly to NCDXF without any taxes being withheld. Please let NCDXF know that you are sending this from your plan trustee so that we can give appropriate documentation to you recognizing your donation.

The *IRS website* has more information about qualified charitable distributions. 