www.ncdxf.org Spring 2019

VP6D Ducie Island 2018 DXpedition

Ducie Island is an uninhabited atoll in the Pitcairn Island group located in the center of the southern Pacific Ocean approximately equidistant from Chile and New Zealand, both several thousand kilometers away. It lies 535km (332 miles) east of Pitcairn Island, and over 1,000km west of Easter Island. The atoll is 2.4km (1.5 miles) long, measured northeast to southwest, and about 1.6km (1 mile) wide.

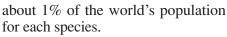
We landed on the crescent-shaped main island of Acadia, on the north and east side of the atoll, which is several hundred meters long and mostly covered in low trees. There are three additional small islets — Pandora, Westward and Edwards — on the southern side of the atoll. Due to its inaccessibility and landing permit requirements, Ducie is rarely visited today.

Amongst the Pitcairn group, Henderson Island is most famous for its birds, but Ducie is also a significant breeding

ground for a number of species. Over 90% of the world's population of Murphy's petrel nest on Ducie (an estimated 250,000 birds); nesting redtailed tropicbirds and

fairy terns

number



Ducie became a DXCC entity on 16 November 2001 after the Pitcairn Island Amateur Radio Association (PIARA) was accepted as an International Amateur Radio Union membersociety. The first expedition was led by Kan Mizoguchi, JA1BK, in March

2002 using the call sign VP6DI. A year later, in March 2003, Ducie was on the air again with VP6DIA, and it was last activated in February 2008 as VP6DX by an international team of 13 operators, who made over 180,000 contacts in 16 days of operation. After 10

years of no Amateur Radio activity, Ducie had climbed up the most-wanted lists and was ranked as ClubLog's #19 before VP6D's activation.



Dave Lloyd, K3EL & Gene Spinelli, K5GS

Planning & preparation

At the 2017 International DX Convention at Visalia, California, continued on page 3

Pitcairn Islands Oeno Atoll 121 km Pitcairn Island South Pacific Ocean Ocean

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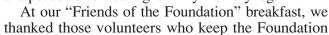


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From the President's desk

The NCDXF Board held its annual meeting on Saturday, 13 April 2019 in Visalia, CA, where we also attended the 70th meeting of the International DX Convention. As Co-Chairs of the convention, NCDXF Director Rich, KE1B, and I were especially pleased at the outcome. Almost 650 avid DXers attended the meeting from 15 different countries, many of whom are strong NCDXF supporters. It was great to have some face-to-face time with old friends and put some new callsigns in my memory log.





running smoothly each year: Doug, WW6D (Administrative Services); Rusty, W6OAT (Advisor); Dick, K6LRN (Video Library), and Walt, N6XG (Beacon Support). In addition, we invited several special guests to share their thoughts and ideas about our great hobby.

Chiltern DX Club (CDXC) Chairman Chris Duckling, G3SVL, reported briefly on the popularity of FT8 as a DXpedition mode and the CDXC/RSGB emphasis on the engagement of youth in contesting and DXing.

ARRL President **Rick Roderick**, **K5UR**, discussed the challenges needed to adapt to, recruit and retain the next generation of hams. He also discussed the license class disparities of ARRL and non-ARRL members.

Michael Kalter, W8CI, CFO and primary spokesperson for the Hamvention, reviewed the enormity of their volunteer program to make the Hamvention so successful and the vision to support all of the hobby, especially youth.

DX Engineering COO & Contest University Founder, **Tim Duffy, K3LR**, reported on the success and enthusiasm of "Team Exuberance," a group of youth who operated K3LR in a recent WPX Contest. Tim expressed his appreciation for the continuing support of NCDXF in making scholarship grants for young hams to attend CTU.

NCJ Editor **Scott Wright, KØMD**, reported on the efforts of NCJ to expand into digital format to reach more DXers and contesters who share common goals in station design and operation.

It was a great discussion during breakfast. Afterwards, we conducted our annual Board meeting and election of officers. I'm pleased to report that all current Directors and officers were re-elected for a one-year term.

Once again, on a personal note, I want to thank each of our contributors for your continued support. You are the backbone of NCDXF. We could not do what we do without you. A full list of individual and club contributors is always shown on our website (*www.ncdxf.org*).

As always, if you have comments or suggestions to help improve NCDXF, please contact me directly. I would love to hear from you.

73 and Good DXing!

John K6MM

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.

members of the Perseverance DX Group (PDXG) discussed several potential DXpedition opportunities, and we quickly decided upon Ducie as our next target. It was clear that there would be plenty of interest since the island had not been activated for a decade, so anyone licensed or taking up DXing since 2008 would not have had a chance to work Ducie. Also, because the island is well positioned for propagation to all major centers of Amateur Radio activity, we expected to be able to work even modestly equipped stations. The potential to make a large number of contacts drove the design of our expedition.

At the bottom of the solar cycle, only a few bands would be open at any one time, so we planned to set up two camps (one with a CW focus, the other primarily SSB, although we operated digital modes from both locations) distant from each other to allow two stations to operate simultaneously on a band when it was open, with a complete set of antennas at each camp to provide maximum operating flexibility.

Ducie proved to be a popular choice and the operating team was quickly filled, and included Dave Lloyd, K3EL; Les Kalmus, W2LK, and Gene Spinelli, K5GS, as team leader and team co-leaders, respectively; plus Heye Harms, DJ9RR; Mike Shapiro, WA6O; Vadym Ivliev, UT6UD; Steve Dyer, W1SRD; Walt Wilson, N6XG; Laci Radocz, HAØNAR; Jacky Calvo, ZL3CW; Chris Tate, N6WM; Arnie Shatz, N6HC; Rob Fantant, N7QT, and Ricardo Rodrigues, PY2PT.

Many of the team members knew one another from previous PDXG or other DXpeditions, or had met at ham radio events. We held several preexpedition teleconferences to help the team gel, dealing with topics such as antenna planning, operator scheduling, travel planning, and the 1,001 other details that must be decided before a team sets out. The detailed plans were documented in the VP6D Operations Manual, which was shared with everyone prior to departure.

Landing on Ducie Island for a DXpedition and overnight stays requires a landing permit — issued by the Police and Immigration Office



on Pitcairn Island — a travel visa and a VP6/D radio license. Shortly after the April 2017 DX convention we applied for the landing permit, including with the application our plan for 14 operators, tents, generators, radio stations and various antenna types. We received the permit in July 2017 and immediately thereafter applied for the VP6D call sign and travel visas.

We selected the expedition ship *Braveheart* from Tauranga, New Zealand, whose owner, Nigel Jolly, K6NRJ, has had a long history of providing outstanding support to the DXpedition community. Nigel's son, Matt, was the skipper for this project, and his younger son, Dan, was a crewmember.

Travel and set up

During the weekend of 13 Oct 18 the radio operators met in Papeete, Tahiti. From Papeete we flew to Mangareva, the easternmost major island in French Polynesia where the *Braveheart* was waiting, our equipment having previously been loaded aboard in New Zealand. Mangareva is a no-frills stop in French Polynesia with just a few cafés and several small shops set up in residents' homes to sell supplies to the locals and the yachting community, but their primary source of income is farming black pearls.

We departed Mangareva on 16 Oct for the journey to Ducie and, utilizing

social media and a Garmin personal locator, our friends and families were able to follow our progress across the Pacific.

Thanks to calm seas and favorable winds, we arrived at Ducie 12 hours ahead of schedule and began transferring equipment on Friday morning, 19 October, using the *Braveheart's* rigid inflatable boats. *Braveheart's* crew, with assistance from the radio operators, established campsites including a kitchen and a covered eating area, plus several large rectangular tents for the radio stations and sleeping accommodations. Each sleeping tent housed three people complete with individual camp cots.

Much of Ducie was heavily wooded, so the tents were put up in between or underneath the trees, which also provided excellent shelter from the strong winds insuring that we wouldn't have to worry about tents being blown down.

Braveheart crewmembers, who stayed ashore with the radio team, prepared three meals a day for us, replenishing their food stocks from Braveheart as required. A camp toilet was dug and a camp shower constructed with each team member being allocated enough fresh water for a daily shower, plus all the drinking water they required.

We established two camps, the SSB/ headquarters/main sleeping and eating

area on the eastern side of the island and, on Ducie's north coast, the CW camp, about a kilometer away. Because a fringing reef surrounds most of the shore, there were only a few possible landing sites, and that determined the location of the two camps.

The 1km separation was adequate to eliminate radio interference between the two camps, but the distance did present some challenges. The shoreline was made of coral rubble and was tiring to walk on, and the dense brush made walking directly between the camps impossible, so the preferred route was to cut across the island from the ocean to the lagoon, then walk along the lagoon's shoreline before crossing to the CW operating site. Even that route was rough, traversing sharp coral shelves and boulders that were, at times, submerged by the tide, but it was preferable to the alternatives. Once people got to know the route, it took about 15 minutes to go from one camp to the other.

We were well supported by various Sansoterra, K8JRK.

Much of Acadia Island sits about 10

manufacturers and distributors of radio equipment, including Elecraft which loaned us eight K3S transceivers, KPA-500 amplifiers and P3 panadapters; DX Engineering provided coax, connectors, tools, antenna parts and miscellaneous items; SteppIR provided the two-element Yagis; Rig Expert with two AA-55 Zoom antenna analyzers, and Arlan Communications provided us RadioSport headsets. In addition, Spiderbeam provided a substantial discount on fiberglass masts, which were used to build many of the antennas. We had several SPE and OM Power amplifiers loaned by team members, and computers for logging were loaned by Bob Schmieder, KK6EK, and a fellow team member. Many of the Pelican and other shipping cases were provided to us by Paul Ewing, N6PSE (Intrepid DX Group); Bob, KK6EK, and Jim feet above sea level, and has a steep drop-off to the shore. The take-off is over water in the direction of NA and EU. For JA the take-off was along the shoreline from the SSB camp but there was a clear shot across the water from the CW camp on the northern shore. Because of the layout of the island, Ducie was an ideal location to use vertical antennas, located just at the edge of the drop off to the sea. Our antenna complement included homemade two-element vertical dipole arrays (VDAs) for the high bands at both sites, four-squares on 40 at the CW and SSB camps, a 30-meter four-square at the CW camp and a single 30-meter vertical for digital operations at the SSB location.

For 80M we had a quarter-wave vertical and for 160M, an inverted-L vertical. A Beverage antenna improved low-band reception. Also at the SSB camp was a two-element SteppIR horizontal Yagi. A 6-meter EME Yagi antenna loaned by Lance Collister, W7GJ, was located near the water's edge along with the VDAs near the SSB camp. The headquarters tent contained two BGAN satellite terminals used for uploading logs, DXA feed and receiving pilot reports. A WiFi link connected the CW camp to the headquarters tent.

Radio operations

Radio operations started during the night of 20 October at 0416 UTC with a couple of stations on the air. The following morning, the entire team returned to work, completing the antennas and camps before full operation started the next day from both camps.

We were delighted to find excellent propagation and strong signals worldwide. During the DXpedition, conditions dropped off a little but, overall, we had few complaints about propagation. During periods of good propagation, all eight stations were in action and, as propagation waned during the night, some of the SSB operations would shift to FT8, where a single operator could handle two or three FT8 stations simultaneously, then, as sunrise approached, the bands would become active again.

One important element of planning NCDXF ~ www.ncdxf.org



for VP6D was scheduling, and we used an approach that had been successful on Heard Island VKØEK: we scheduled operators for four or five stations, depending on expected band activity, while the remaining stations were open for any other team member to use. The scheduled ops worked with designated team leaders to decide which bands/ modes to use, and had priority during their operating shift. Operators coming to any of the remaining free stations could choose to do whatever they wanted, so long as the band/mode was not already occupied by a scheduled operator. This design ensured that all ops had a significant base amount of operating time, while providing an opportunity for extra time on the air for those who wanted.

Each morning, we'd look at the N1MM+ graphs and see that we were making ~10,000 QSOs a day. Signals from all over the world were strong. Pilot reports and over-the-air reports told us we were being heard without much difficulty on most bands, with



6M EME antenna.

numbers that FT8 was our primary digital mode.

We had advertised the WSJT-X software version (1.9.1) and the fox/hound operating style we would employ and, for the most part, callers followed the instructions on our

website. However, a fair number didn't get the message straight away and were calling below 1000 Hz. This seemed to improve as time went on, as more people got the hang of fox/hound operation.

It was interesting to see the popularity of FT8, not just amongst the callers, but also the DXpedition operators. Perhaps the chance to remove the headphones and relax a bit was an occasional welcome break from the adrenaline rush of working a pileup on the other modes.

The EME operation was an interesting venture for us, since there was almost no EME experience within the team. However, we were given guidance by Lance, W7GJ, and by using his loaned EME antenna and "expedition procedure" we were able to make several QSOs on most nights. EME activity was limited to moonrise only because of the location of the antenna, and other competing operating activities.

BAND/MODE	CW	FT8	JT65	RTTY	SSB	TOTAL QSO	TOTAL %
160M	2,672	353	0	0	1	3,026	2.7%
80M	4,931	1,143	0	0	266	6,340	5.66%
40M	11,771	5,867	0	329	3,720	21,687	19.36%
30M	7,466	3,643	0	1,650	0	12,759	11.39%
20M	7,313	5,474	0	1,668	6,526	20,981	18.73%
17M	8,643	3,658	0	1,225	4,960	18,456	16.47%
15M	8,429	2,224	0	811	5,561	17,025	15.2%
12M	4,344	1,805	0	2	1,693	7,844	7%
10M	3,033	273	0	0	589	3,895	3.48%
6M	0	0	28	0	0	28	0.02%
TOTAL QSO	58,602	24,440	28	5,685	23,286	112,041	100%
TOTAL %	52.3%	21.81%	0.02%	5.07%	20.78%	100%	

the exception of 10/12 which were closed most of the time. Despite the low sunspot number, VP6D logged over 112,000 QSOs with just under 25,000 unique call signs: 53% NA, 26.6% EU and 15.8% AS.

Firsts from Ducie Island were 28 6M EME contacts and 24,400 FT8 contacts. A couple team members were enthusiastic RTTY operators so we made nearly 6,000 contacts by this mode. Still, it was clear from the

CONTINENT/ MODE	CW	FT8	JT65	RTTY	SSB	TOTAL QSO	TOTAL %
AFRICA	190	93	1	20	215	519	0.46%
ANTARCTICA	1	0	0	0	1	2	0%
ASIA	10,723	4,423	0	1,192	1,395	17,733	15.83%
EUROPE	17,614	6.703	19	1,445	3,997	29,778	26.58%
N.AMERICA	28,279	12,112	8	2,819	16,036	59,254	52.89%
OCEANIA	642	443	0	36	257	1,378	1.23%
S.AMERICA	1,153	666	0	173	1,385	3,377	3.02%
TOTAL QSO	58,602	24,440	28	5,685	23,286	112,041	100%



VP6D team at the lagoon—(standing, from left): Steve Dyer, W1SRD; Rob Fantant, N7QT; Gene Spinelli, K5GS; Laci Radocz, HAØNAR; Walt Wilson, N6XG; Les Kalmus, W2LK; Vadym Ivliev, UT6UD; Ricardo Rodrigues, PY2PT; Mike Shapiro, WA6O, and Dave Lloyd, K3EL. (Kneeling, from left): Heye Harms, DJ9RR; Jacky Calvo, ZL3CW; Chris Tate, N6WM, and Arnie Shatz, N6HC.

We used DXA to provide real-time acknowledgement of contacts made, and QSOs were also uploaded to the PDXG online log, which was the basis for our OQRS system. These operations were not as smooth as we had hoped, due to challenges of building a robust network across the island — eventually achieved after a couple of days experimentation — and some incompatibilities between N1MM+ and WSJT-X, resulting in some contacts not making it to the N1MM+ log while on island and requiring resolution after the DXpedition.

Departure

On 30 October, the skipper informed us of worsening sea conditions with increasing onshore winds and a significant swell building from a storm system that had passed to the south. Since Ducie has no natural harbor, we were very dependent on favorable tide and sea conditions to safely leave the island, so we began removing nonessential equipment a couple of days before our planned departure.

The extraction process was exciting for all involved. Team members, assisted by the boat crew, walked two at a time through the surf on a slippery coral base to the edge of the reef where the zodiac could meet us. The skipper brought the zodiac in and people were "helped" aboard the zodiac, one at a time as it came in on a wave, then the skipper quickly leaned on the throttle to get away from the coral, before maneuvering back for the next passenger. It was an exciting exit, but the next morning's activities were even livelier when four team members returned to the island to help the crew recover the remaining equipment. By that time the wind had picked up significantly and the exhilarating experience of landing, loading and returning was one that we will remember for a long time.

After everyone — and everything — was safely aboard *Braveheart*, we began the 36-hour journey to Pitcairn where we were met by islanders who then transferred us from *Braveheart* to a longboat for a wet 30-minute ride to Bounty Bay to meet Pitcairn Island

Police and Immigration officials who processed our arrival and stamped our passports. While there, the team had an opportunity to have a look around and meet some locals, several of whom had Amateur Radio licenses, before we needed to return to the Braveheart and continue our journey to Mangareva.

Reflections

Once we were back in Tahiti, we had some time to relax and look back over the past three weeks. The consensus was that VP6D had been a great DXpedition for the team. We enjoyed hearing from people who contacted us, be they mega-stations looking for a full house, or a temporary QRP setup on a beach looking for one QSO. A consistent theme from many who wrote to us was they had "fun" working VP6D.

Wrap up

We would like to acknowledge the help and support of many groups and individuals who contributed to Ducie 2018. Major early sponsorship from organizations like the Northern California DX Foundation (NCDXF) and the German DX Foundation (GDXF) was important to kick-start our fundraising, and many other clubs and foundations also supported us. (A full list of corporate and club/foundation sponsors is available at *VP6D.com*.)

Over 1,500 individual donors contributed via the VP6D website, and an additional 1,700 have contributed since the DXpedition. As listed earlier, Amateur Radio manufacturers gener-

ously donated or loaned equipment. Many individuals supported the onisland team and, in particular, we want to recognize our Chief Pilot, Glenn Petri, KE4KY, and his team of pilots; Pista Gaspar, HA5AO, who supports the PDXG websites and the OQRS/QSL system, and of course, Tim Beaumont, MØURX, who processes and mails your QSL cards and uploads your LoTW confirmations.

Among the highlights of the project

were giving many DXers an ATNO and/or band fills, putting people on the Honor Roll, logging the first EME and FT8 contacts from Ducie Island, and working with a fantastic team of radio operators. We must also recognize Matt Jolly and his *Braveheart* 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 VP6D Ducie Island 2018.



The NCDXF booth and some team members at IDXC 2019 in Visalia. Pictured are (from left), Don Greenbaum, N1DG (Treasurer); Doug Bender, WW6D (Admin Services); Glenn Johnson, WØGJ (Secretary); Tom Berson, ND2T (Director); Ross Forbes, K6GFJ (Director & Historian); John Miller, K6MM (President & Webmaster), and Roly, ZL1BQD. Photo by Lucas, W6AER

50 Years Ago A Blast From the Past

West Coast DX Bulletin February 19, 1969

"To fill in the space, we are going to throw in some examples of verse in the classic anapestic form, taken from R. Halliburton Newkirks Anthology, 'Verse from a Flat Linear in a Dead Band.' This is simply our culture corner."

That hog in the manger MacSpray Enrages the rare ones each day. They don't hear his squeaks So he steps on their freqs Till they naturally all go away.

He called as a zealot inspired, with larynx that never grew tired His CQ DX And what happens next? The poor nitwit's license expired. Sneek's phone score is utterly grand Few higher exist in the land But how does he do it? There's just nothing to it. He collars them outside the band.

A scurrilous ham from Dundee Fired up on the Island of Squee The speed of his card He was prone to retard If you failed an appropriate fee. Consider the crust of McSquatz
Who knocks of the rarest of spots
Skillful? No, cunning —
The reptile is running.
Entirely too many watts

Gab Gabber gives many a pain
His routine is darned near insane
Each new one he'll work
Not just once, the jerk
But again and again and AGAIN.



AFTER THE UNDENIABLE SUCCESSES OF FT4TA Tromelin in 2014 and FT4JA Juan de Nova in 2016, the team was ready to start another challenge. This time our adventure would land us on L'île du Sud in Mauritius' St. Brandon archipelago, operating under the call sign 3B7A.

This formidable operation was controlled to perfection by Sebastien Poulenard, F5UFX, and Florent Moudar, F5CWU, and profited from the proven experience of Vincent Colombo, F4BKV. In addition, Michel Brunelle, F6AGM, advised us on the basis of his experience of 3B7C in 2007.

A long-awaited rendezvous

On Sunday, 1 April 2018, the team met at Paris-Orly Airport, smiling and ready for new adventures! Patrick Bittiger, F2DX, introduced us to Jean-Baptiste Jacquemard, F8DQL, who offered his help to maintain the website during our absence. Laurent Rigal, F8ATM, our new "rookie," joined the team and everyone welcomed him warmly! After going over our checklist, we divided our equipment up to fit into different suitcases in order to avoid

extra luggage fees, keeping fragile equipment in our carry-on bags.

Although we boarded on time, mechanical problems kept us grounded until the following day. With that 24-hour delay, our schedule was tightened and the pressure went up, but the team's morale was excellent.

Vincent, F4BKV, had flown from Barcelona, Spain, a few days prior so he was already waiting for us in Mauritius.

Finally en route, we encountered a longer-than-intended stopover at

Réunion so we quickly reorganized some logistical points with Vincent, F4BKV, by telephone. Thanks to the help of a Mauritian friend, we organized our transfer from the airport to the harbor area, and purchased some necessary equipment for the expedition. Once we reached Mauritius, we traveled by taxi to the harbor on the opposite side of the island, where our first boat would depart Port Louis that evening.

As a result of the cumulative 27-hour delay, our flexibility was reduced to nothing. Florent, F5CWU, and Pascal



Roha, F5PTM, immediately embarked on one of Raphaël Fishing Company's (RFC) fishing boats taking with them our food, water, fuel and ice, plus crates of equipment sent several weeks earlier. Each crate had been unpacked and checked to be certain that nothing was missed or damaged.

With the formidable work of Florent, F5CWU, on logistics, assisted by Patrick, F2DX, many problems were met and managed throughout the months of preparation. Other tasks were distributed between the various team members who tested the configuration of the stations, in particular the TRX SunSDR2 PRO over several weeks. A 100% SDR expedition, the bet was on; however, we had already received much positive feedback (including our own from FT4JA). We also tested our secondary equipment, including our coaxial "Messi & Paolini," low band system bandpass filters, and laptops during contests for their reliability and to accustom ourselves with their use.

Concerning the antennas, once more

we chose the two-element vertical dipole array built by Vincent, F4BKV, for high bands, and the usual low band configuration, which showed their efficiency during our last expedition under similar conditions.

Our only main concern was related to electricity. We didn't know the state of the rented generators — how they were maintained and under which conditions they worked. On the islands, equipment suffers a lot.

Unlike FT4JA, where we had new generators, tested, approved and maintained by our care, this time we had to cope with another configuration and trust in equipment that is key to the mission, but without any control before starting the operation. We did not want to take any risks, so we had several alternative solutions while keeping an eye on our expenditures.

We are ready!

On 5 April, most of the team members were still in Mauritius, but the day started with the news that Florent,

F5CWU, and Pascal, F5PTM, had arrived after 26 hours at sea, and had gone ashore with all equipment. They were even able to check and start the generators and everything was running smoothly.

The rest of us embarked on the *Paille* en *Queue*, which was smaller than the first boat, but well-equipped for this kind of journey, and, 26 hours later, we could distinguish the island just above the horizon and an imposing shipwreck grounded on the reef.

Located approximately 420 kilometers from Mauritius, this archipelago is composed of small islands and sand banks and has been managed by RFC since 1928. The island is a long, sand bank just a few meters above sea level with many tropical bushes. Birds were everywhere and were nesting when we were there.

Near the three coastguard houses, palm trees lined a path leading to three other small concrete buildings where company workers reside. One of the buildings was the guesthouse.







This small paradise is a haven for nesting birds, with the white tern being the main species with which we coexisted throughout our stay. As usual with our operations, we did our best to minimize our displacements and limit the deployment of equipment in order not to disturb the birds. Several birds nested on the window's edge of our small house and, toward the end of our stay, several eggs had hatched! On this archipelago it is the human who is the guest, not the birds!

We unloaded our remaining luggage and observed some VDAs already installed, as well as the 30-meter 4-square on the northern beach. On the ground, other antennas were already prepared and waiting to be erected thanks to the excellent work of Florent, F5CWU, and Pascal, F5PTM, who had arrived the day before and had already assembled the stations. The morale and motivation was good and the group's cohesion was fantastic. Without losing a minute, the team started working despite the heat, and our first QSO was completed on 20M SSB at 19h00 UTC with EA7/ OH3ELB. We started our activity on 17M SSB, 40M CW and 30M RTTY and all operators were smiling as soon as the pileup intensified, in spite of our tiredness and the 30°C temperature in the patio.

Operations underway

At 04h00 UTC on 7 April, Gil Sauvage, F4FET, announced that the 4-squire installed on the beach worked like a charm and that propagation with the US was great with the sunrise. It was excellent news! Before temperatures climbed, we needed to assemble the verticals for 80M and 160M, and set

up receiving antennas for EU/US and JA in order to start low-band operations that evening.

The day was excellent in spite of not very positive propagation predictions, and at 20h30 UTC, the log showed 9,000 QSOs — we were very satisfied and encouraged by the results in our first hours.

Sunday, 8 April, marked Patrick's, F2DX, 60th birthday and we took a short break to toast him. We also took advantage of that off-radio moment for a debriefing and to share the comments received at that point. Our chief pilot, Michel, F6AGM, who was in touch with other pilots, gave us important information through our satellite connections and that allowed us to adjust our schedule.

The SunSDR2 PRO worked marvelously well — what a powerful product in a small box — the settings chosen prior to the expedition were satisfactory. The VFO (E-coder) was ludic and gave access to the main functions. The association of the SDR was perfect with our lightweight amplifiers Expert SPE 1.3K in whatever mode of traffic was used. The visualization of the pileup via the

spectrum displayed on the laptop was impressive and extremely useful to manage the traffic.

We observed excellent openings toward Europe and our Japanese friends and their signals were impressive on the different bands. The traffic was fluid — much more compared to our previous operations — thanks to less call repetitions.

That evening, around 17h00 UTC, a short opening toward the US appeared on 17M and 20M; some of them were very loud. While some team members were busy with pileups, others were trying to improve our RX antennas and a phasing of KD9SV flag was added that afternoon. Vertical dipoles were installed to give us the opportunity to work with two stations on 20M and 15M, which were the most productive bands. We wanted to be present as long as the band was open to give a chance to all, particularly for those in the most difficult zones.

The 80M and the 160M stations were active and logged many stations; the propagation conforming to what we were expecting and by that evening we had logged 15,000 QSOs.

On Monday, 9 April, conditions on



the high bands were far from being identical to the previous days. The NA stations were very weak but we were conscious of the situation and redoubled our attention on them. JA, NA and EU pileups were sometimes on top of each other and management was a bit complicated from time to time, but we topped 25,000 QSOs as we greeted our buddy, Cédric Morelle, F5UKW, who was our control station during FT4JA.

The low bands remained productive with all the continents as conditions evolved, in particular on 10M, which was under monitoring, and we used it to work many stations on CW and

SSB. On the other hand, 20M and 17M closed prematurely.

Pushing through

By Thursday, we were all feeling the tiredness, with most of us getting just a few hours of sleep in the heat. Undoubtedly, the group's cohesion made it possible to combine the relaxed environment and effectiveness during our shifts.

On the beach, we had to regularly check the

guying of our masts and some anchor points had to be reinforced. Sebastien, F5UFX, continuously pointed out propagation slots not to be missed toward certain areas of the globe and Pat, F2DX, prepared a document showing the VOACAP/K6TU predictions. With such information we knew where to listen, but the signals on 80M were weak and the noise level was very high.

The 160M station was close to 1,000 contacts using a Spiderbeam 18-meter mast with a wire hat — provided by our friend Cornelius, DF4SA.

We underwent DQRM, which made the pileup difficult to control. It is a pity, especially when the bands are favorable

to offer many ATNO. Throughout the day, however, Laurent, F8ATM, and Gil, F4FET, blackened the logbook in RTTY at a good rate, helped by the

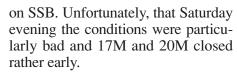
spectral visualization of the SDR. That was a real plus!

By the end of the day we approached 50,000 QSOs, well on our way to achieve our goal of 70,000!

Wrapping it up

In spite of the difficulties and our tiredness, our morale was still excellent going into our last weekend. The CW

rate was higher than SSB, especially when the conditions were not very good, and we didn't hesitate to exploit most of the bands on CW to keep a good rate. As soon as the signals grew, we switched



Sebastien, F5UFX; Patrick, F2DX; Florent, F5CWU, and Pascal, F5PTM, gave their maximum on CW in spite of the disturbances and those who were calling obstinately when a QRX was asked.

On Sunday, while some continued the traffic, others started disassembling the camp. We kept only the antennas that would be used by Gil, F4FET, and Diego, F4HAU, the two operators who were

staying on for two more days, departing on the other boat. All the equipment had to be arranged properly so that it all fit back into the crates for the return trip, as once we reached the harbor, we wouldn't have time to recondition everything.

That evening we had reached 69,000 QSOs and we wanted to work the missing 1,000 on our last night, but overnight propagation was very bad and we weren't able to keep all stations on the air.

In the morning, six team members left the island and, suddenly, there was silence after 10 days of intensive activity! The peace of that place reappeared and it was as pleasant as it was perturbing.

Gil, F4FET, and Diego, F4HAU, were entrusted to go beyond the 70,000 contacts and complete the logistical operations, so the two-person team sat down again at their radio stations for



their last moments on that IOTA in the middle of the Indian Ocean. PAØMDB was our 71,158th and last QSO, contacted on 30M RTTY. We had a general feeling of relief, satisfaction and joy. All this adventure was carried out as a team, and what a team!

Thank you

We very sincerely thank all our sponsors for their confidence and their fidelity! Although each operator finances his own travel, housing and an important part of the expenses related to the expedition, another significant part is covered by the sponsors, professionals, associations and clubs, and individuals. These supporters are essential in this kind of adventure and we take our hats off to all those who have been involved in the adventure and made of this project a success.

Thank you, also, to our pilot stations (F6AGM, N6PSE, JJ3PRT, LU5FF, ON9CFG), in addition to our families and friends who always answered when we needed some help.

On behalf of the team, I thank Sebastien, F5UFX; Florent, F5CWU; Vincent, F4BKV, and Patrick, F2DX, for their remarkable work so that this

project became a reality. I also thank the rest for the team, made up of Pascal, F5PTM; Laurent, F8ATM; Gil, F4FET, and, in support, Michel, F6AGM, and Jacques, F6BEE.

I appreciate this team, a small and true family. For sure those guys are more than simple friends. Thank you for these good moments in that so peaceful place and for the attention that each one carries to the others.

Only one question remains since our return to France: With this cohesion and this desire of going always farther, over our own limits, where will it carry us the next time?

NCDXF Director Profile

NAME & CALL SIGN: Lee Finkel, KY7M

PAST CALLS: N9BT, WA9EBT, WN9EBT, PJ2/KY7M, 5B/KY7M, EL2LF, TZ6LF, 5U7LF, ZF2LF

CURRENT LOCATION: Phoenix, Arizona (+ remote station @NA7TB in Safford, Arizona)

WHAT ARE YOUR PREVIOUS QTH's? Chicago, Illinois

If YOU'RE WORKING, WHAT IS YOUR CAREER? IF NOT, WHAT WAS YOUR CAREER? Retired since 2014. In-house counsel for labor and employment law with Fortune 500 companies including Motorola and Sears, Roebuck. My last 18 years were with University of Phoenix in academic and administrative roles. B.S. Communications (Radio-TV) from University of Illinois, Urbana; JD from The Ohio State University. Retired member of State Bar of Arizona.

NCDXF LEADERSHIP POSITIONS? Director since 2018

OTHER LEADERSHIP POSITIONS? President of Central Arizona DX Association (5 terms); Program Co-Chair for International DX Convention (2017, 2019)

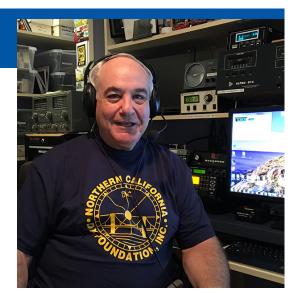
CURRENT DXCC STATUS? #1 Honor Roll Mixed and Phone, 339 on CW, 329 on Digital, 2,833 on DXCC Challenge

DXPEDITION EXPERIENCE? Member of the Voodoo Contest Group included trips to 9G, 5V, XT, 5U, EL, 5B and PZ. I have also operated with teams from KP2A, HC8N and PJ2T. Currently a member of the PJ2T Caribbean Contesting Consortium.

What would you tell someone who is thinking about contributing to NCDXF? The Foundation has a long history of generously supporting DXpeditions to the most-wanted DXCC entities. These trips could not happen without significant financial support of the type NCDXF offers. The Foundation vets grant requests more thoroughly than any one individual or club to best assure that the money will be used for its intended purpose.

As an avid DXER what sorts of trends do you see? There are fewer DXpeditions now that the sunspot cycle is at its minimum. Nevertheless, we see trips planned to rare locations that will make many QSOs using the bands that remain open. The hobby is changing rapidly with the innovations in digital technology like FT8. These are exciting times for Amatuer Radio and DXing will evolve with the technology. The amount of activity on FT8 is revealing propagation patterns no one knew existed before, especially on 6M Sporadic E.

Any TIPS FOR DXERS? Keep your software up-to-date and read a DX bulletin like *The Daily DX* to know what countries are active from day to day. I monitor the



ON4KST chat rooms for 160M in the winter and 6M in the summer to keep up with DX activity. Definitely use LOTW and Club Log; they are critical tools for any serious DXer.

Any advice for NCDXF? Keep up the good work. Let's try to expand the number of DXpeditions we support by looking beyond the Top Ten Most Wanted in these times of the sunspot minimum.

Describe your shack and antenna system: The home station is an Elecraft K3 with either a KPA500 or Alpha 87A amplifier when needed. Antennas are 3 el. SteppIR at 66 feet; 2 el. Cushcraft 40-2CD at 55 feet; 6 el. Innov LFA at 60 feet for 6M; inverted L for 80M, and shunt fed tower for 160M. My remote station is an Elecraft K3 to an Expert 2K-FA. Antennas are 8-Circle for 160M; 4-Square for 80M; 4-Square for 30/40M, and C-19XR for 10/15/20M.

MARRIED? KIDS? GRANDKIDS? I have been married to Debby for 48 years. We have two grown (and married) sons and five grandchildren.

Any other hobbies besides Amateur Radio? Working out at the gym, playing an occasional round of golf and writing about my hobby.

WHAT MIGHT SOMEONE BE SURPRISED TO KNOW ABOUT YOU? I am regularly requested to decorate birthday cakes for my granddaughters.

Any other comments? I started in Amatuer Radio at the age of 15 in Chicago after building a Knight-Kit Span Master receiver and hearing local hams rag chewing. I took my novice exam from K9GBS (George-Bernard-Shaw), the blind son of a family friend. I started DXing and contesting once I got my general license a year later and have had few interruptions in my ham career since then. The hobby has provided me with a wealth of life experiences through international travel and friends. I love Amatuer Radio and hope my position with the NCDXF will allow me to give something back to this amazing pastime.

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 Director 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."

Craig invites DXers interested in the Cycle 25 Society to visit the NCDXF website www.ncdxf.org/pages/estate. html for more information. You can also contact Craig to discuss Cycle 25 Fund funding options, including specific bequests, designation of IRA beneficiaries and purchase of an annuity or life insurance.

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 bor-

rowing materials are responsible for postage in both directions. To view the complete listing of programs available for your club's use, visit our website, www.ncdxf.org, and click on "Videos."

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

Ned Stearns, AA7A Al Burnham, K6RIM Craig Thompson, K9CT Alan Rovner, K7AR Rich Seifert, KE1B Tom Berson, ND2T Bob Schmieder, KK6EK Glenn Johnson, WØGJ Ed Muns, WØYK Rich Haendel, W3ACO Dan White, W5DNT Charles Spetnagel, W6KK Rusty Epps, W6OAT

Show your support for NCDXF

NCDXF offers several ways for you to show your love for DXing! Impress your friends with a gold lapel pin (\$7), show up at your next hamfest sporting the NCDXF hat (\$12) or don a NCDXF T-shirt (\$15) to set up your Yagi on Field Day. Send out your QSLs with an NCDXF label (roll of 500, \$7). Mail in the attached form or visit www.ncdxf.org to order today.



Contribution & Order Form

YES! I want to contribute to NCDXF!

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