



NCDXF newsletter

www.ncdxf.org

Summer 2019

KANTON ISLAND — T31EU QRV from a scrap heap

Ronald Stuy, PA3EWP

WHILE ENJOYING A NICE BEER AT THE 2018 Hamfest in Friedrichshafen, Germany, we exchanged many ideas about our next destination(s).

At the end of August, I was asked to join a German team planning to go to Kanton Island, Central Kiribati, which I initially declined because of the time commitment that would be required; however, when an airline was found that regularly flew from Tarawa to Kanton, my decision was made and I became a participant in the 6-man team.

Our team consisted of team leader Günter Gassler, DL2AWG; co-leader Hans Griessl, DL6JGN; Joe Pick, DK5WL; Norbert Willand, DF6FK; Heye Harms, DJ9RR, and myself. Norbert joined our team a week before our departure as a new operator after Wolfgang Rebling, DM2AUJ, had to cancel due to health problems.

Kanton is an atoll belonging to the



Phoenix archipelago (Central Kiribati) and located 1,750 kilometers from the main island of Tarawa, a separate DXCC country for radio amateurs.

Kiribati, itself, consists of four DXCC countries: T30 (Gilbert Islands, Tarawa main island); T31 (Phoenix Islands, Kanton main island); T32 (Line Islands, Christmas main island), and T33 Banaba (part of the Gilbert Islands but 450 kilometers west of Tarawa and for us radio amateurs, a separate DXCC country).

Planning stages

We chartered the plane to fly us from Tarawa to Kanton, and return for us 17

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PIPA's office on the island.

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From the President's desk

I HOPE YOU'RE ALL HAVING A GOOD DX SUMMER! Over the last few months NCDXF has been busy reviewing and approving grant applications for a number of DXpeditions taking place in 2019 and 2020.

The Board approved a major grant of \$30,000 to support the VP8/VP8DXU DXpedition to the much-needed South Orkney Islands in early 2020. Co-team leaders Gene Spinelli, K5GS; Dave Lloyd, K3EL, and Les Kalmus, W2LK, have assembled a first-class on-island operator team.

We're also supporting upcoming trips to Western Kiribati (T3ØL) and Nauru (C21W). Team leader Yuris Petersons, YL2GM, has put together an exciting back-to-back operation in September. One of the operators is Kristers Misa, YL3JA, a 21-year-old first-timer and future WRTC hopeful.

Finally, we are providing support to the ZK3A DXpedition to Tokelau Island this October using a unique matching donation program. To encourage more European club participation, NCDXF pledged \$2,000 up-front to the DXpedition and also offered to "match" up to an additional \$2,000 in pre-trip funded grants obtained from any EU DX clubs and foundations. I am happy to report that this "2+2" plan worked very well, as the ZK3A team has already received more than the \$2,000 target from European clubs and foundations.

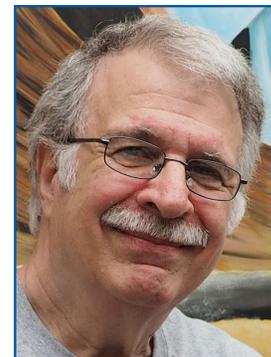
In other news, we have made great progress in improving our Beacon program. By year's end, all 18 NCDXF Beacon sites will have been upgraded with new ICOM IC-7200 transceivers, new GPS receivers and Arduino-based controllers. We have also developed a unique dual-band discone antenna, which will be deployed in all locations after final testing and production. Special thanks go to ICOM for their support, and to volunteers Tom Berson, ND2T; Kevin Rowett, K6TD; Ned Sterns, AA7A; Walt Wilson, N6XG; Peter Jennings, VE3SUN, and Charlie Simpson, N4NJK, for their leadership and support.

Finally, I'm happy to report that 14 individuals have now included NCDXF in their estate plans. 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. See the separate Cycle 25 update in this newsletter.

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!



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.



Our radio shack located at the airport on Kanton Island.

days later. Of course, we were limited in the total weight that we could take with us (+/- 860kg, including people) aboard the super Kingair 200.

Our goal was to hand out as many All Time New Ones (ATNO) to amateurs as possible, but we also wanted to focus on Europe because Kiribati was high on the “most wanted” list there, and for Western Europe it was in 6th place in digital mode. In addition, when the conditions cooperated, we wanted to have at least two stations active for 24 hours with a focus on the low bands.

Chuck, our contact person on Tarawa, organized a lot of things for us and without him it would have been almost impossible to organize this DX-pedition. He purchased many materials on our behalf, including a new generator and, as I was in Tonga (A35EU) at the end of November, I sent him a ski bag filled with several (Spiderbeam) fiber masts and 250 meters of coaxial

cables (rather than return with them to the Netherlands, then turn around and take them to Kiribati).

Chuck was busy for at least two months as he attempted to send materials from Tarawa to Kanton by boat, but no boat was to be found; instead, he arranged food and drinks to be delivered by boat from Christmas Island to Kanton. The rest of our materials had to travel with us by plane, which became a big challenge because Chuck, too, wanted to fly to Kanton with us. He had arranged all the paperwork with PIPA (*Phoenix Islands Protected Area*) for the authorization to land on the island and our license from CCK (Telecom).

Setting off

Because we had to bring the generator and the ski bag on the plane with us, there was no longer room available for Chuck. Even though there were

two generators on the island, I insisted on bringing the generator, and the team agreed, with the reasoning that it was more important to bring a good working generator instead of trusting the generators on the island.

The day before our planned departure the pilot informed us that the weather was too bad to fly and our flight would be postponed by a day. After some negotiation, we also postponed our return trip by a day, keeping our days on Kanton to 17.

Our flight to Kanton took just 4½ hours, and we arrived just before noon. We decided that our shack would be near the airport, as there was a perfect building with a lot of space for antennas.

Digging right in

We decided to install the 30M and 40M antennas for the first evening/night activities. One of the village’s generators was installed outside the shack, and after we started it we noticed that there was no voltage present. Dismantling the generator, we still could not find the problem, so we got the second generator, which was a little better, giving us 220 volts. However, as soon as we started and the power consumption fluctuated, the generator stopped working, so we couldn’t use that generator, either. We exchanged that generator for the one we brought with us and our problems were solved. We set up the shack after dinner and we were ready for the first QSOs.

The next day we installed other antennas, but had no time to place the



The interior of our radio shack.

receiving antenna for the low bands until the following day.

We made two shifts of three operators but we were unable to transmit simultaneously with three radios with +/- 1kW output. Our generator was only 3,800 watts and all stations could make approximately 700 watts.

The propagation was certainly not optimal, but we knew that beforehand, and Western Europe was our biggest challenge as the signals were weak or totally not workable at all. The path directly over the North Pole was extremely difficult.

Often the signals from Eastern Europe were S9, but to the west from central Germany it was very difficult or not at all possible. The second week we adjusted to two operators per shift, partly because of the poor propagation, and during the late night and the morning only two bands were open at the same time. During the day and in the evening, another operator could use the third station, but on low power only, and that allowed the other two stations to make slightly more than 1kW. The third station was therefore regularly on FT8.

We focused on the low bands, as the chance that the high bands were open was minimal.

All the antennas were mostly in the direction of Europe, but during the day we often turned the antennas to North America to be able to work the weaker stations. The Beverage was also pointing north, toward Western Europe.

The chance that we would work a lot of Western Europe at 160M and 80M was also very little, but if we didn't try,



Joe, DK5WL, gave the local school children a demonstration of our radio activities.

it would certainly not work.

During my own shifts in the evening and at night I was always active at 80M or 160M. Unfortunately, we could use both bands at the same time because we had to extend the 80M vertically for 160M as inverted-L. The antenna had to be taken down for the band to have a chance and we had to make that choice in the evening before it got dark. Normally, it was two days on 80M and two days on 160M.

We had a lot of static on the low bands, sometimes it was so extreme that it was only possible to make some QSOs on FT8.

A little history

In 1979, Kiribati gained its independence from the United Kingdom, but prior to that, both the English and the

Americans had their piece of Kanton Island, separated only by the harbor. Today only the American side is inhabited and its population is less than 40, down from a high of 1,200.

The island's infrastructure — roads, telephone, power and water distribution — are what remain from the American and English occupancy and all the houses, buildings and factory halls plus the power station, satellite tracking station and telephone exchange, etc.,

THE ANTENNA PARK LOOKED LIKE THIS

BAND	ANTENNA	DETAILS
10/12/15 Meter	Multiband vertical	10 meter fiber mast
17 Meter	VDA	12 meter fiber mast
20 Meter	VDA	12 meter fiber mast
30 Meter	VDA	18 meter Spiderbeam fiber mast
40 Meter	Phased vertical	2 10-meter fiber masts
80/160 Meter	¼ vertical/inverted-L	18 meter Spiderbeam fiber mast
RX Beverage	180 meters long	Direction north



The old satellite tracking station.



(Left) Monita, the teacher at the school on Kanton. (Above and right) Local kids hamming it up for us.

were still there, but they were in such a state that it was too dangerous to walk inside these buildings. Along the roads, rusted out remnants of trucks, bulldozers, fire engines, etc., sat where they were left 50 years ago.

Kanton was not a tropical, exotic luxury vacation. In fact, it was the opposite, but the people were very friendly and welcoming! The islanders took turns preparing meals for us three times a day.

Daily operations

We had three complete stations, which could be used in all modes.

Elecraft K3 with an HLA1200 amplifier, Elecraft K3 with an Expert 1.3K amplifier, Elecraft K2 with a THP 1.1 amplifier. We used bandpass filters between the radio and the amplifier to eliminate any interference.

Logging was done with Win-Test in a network configuration, and all laptops could see the QSOs that were logged. We were also able to set the correct time on all PCs for FT8 with WSJT and/or MSHV.

Internet wasn't available in the shack, but on one PC the time was synchronized with a GPS receiver and distributed by network to the other laptops. There was Internet on the island, but it was a 15-minute walk from the shack in the PIPA office, which is where we daily uploaded our log to Clublog, giving amateurs the opportunity to see that they were in the log.

FT8 was mainly used in Fox/Hound mode, but if there were only a few callers we used the normal mode. If

there were too many stations calling, we QSYed to another frequency for the Fox/Hound mode, usually using the MSHV program for normal mode. We could work up to three stations at the same time.

For me, FT8 was not my main mode; I only used this mode when there was no activity on the other modes. I'd rather make the QSOs myself rather than have the computer make them for me, but I was surprised that it was possible to let the computer log 170 QSOs in an hour on FT8. The signals, however, must be loud and it was only possible with Asia and NA. I found it very frustrating that there was no more activity on CW/SSB or RTTY, only on FT8. The signals were loud enough for a QSO in normal modes.

The advantage of FT8 is that many amateurs on the other modes in the past could not work DX, now their computer can work DX with the same setup. Hopefully these amateurs will quickly switch to SSB or CW and will

make the QSOs themselves again, certainly if the propagation increases in the coming years.

Because the propagation was poor, we had an extra challenge on SSB. Norbert had the disadvantage that he only does SSB and he was often calling for four hours for less than 20 QSOs. After a few days we had made the shifts in such a way that there was always one band open for the SSB operator. This also made it more fun for Norbert.

Locals

While on the island, we made regular visits to the local school and its 20 children and their teacher, Monita, who explained much about the island and its people. Both Joe and I shared with the children about Europe, Germany and the Netherlands and answered their questions. We all had a great time.

On one of the afternoons, the whole school even visited our shack for a radio demonstration and it, too, was something we all enjoyed.



Enjoying our last evening with a feast prepared by the locals.

Winding down

On the last day we dismantled all the antennas except for the 160M as we planned to remain active for our final night, including the sunrise.

That evening we were invited to an appreciation party hosted by the locals and it was beautiful. I know Joe, especially, won't forget that evening, as it was his birthday and all the children sang for him in both English and their language.

All residents prepared food for the party and there were several tables filled with rice and fish, plus two large lobsters and a small pig, which they had slaughtered that day. It was a feast for them as well; there was a lot of singing and dancing by the children and, by the end of the evening, Frank accompanied them on guitar (which we donated to the people) and all the residents joined in the singing. It was an evening that will be remembered for a long time.

Our last 160M shift started with three operators, but the static was so huge it was impossible to make QSOs. Heye had started, then Joe, and when I relieved Joe, there were less than 40 QSOs in the log. I started my shift on CW and soon realized it was impossible to continue. Then I went to FT8 and the computer logged about 30 QSOs including a few southern Europeans. It was very unfortunate about the static, I saw about 10 stations calling during the European greyline, but the computer could hardly decode anything because of the static.

After the last QSO was logged, I started to dismantle the station. After breakfast we took down the inverted-L



We followed in the tradition for visitors to Kanton Island by planting a coconut tree prior to our departure.

for 160M and made everything ready for departure, but before we left, we planted a new coconut tree as a tradition.

End results

We were satisfied with the results, just over 39,000 QSO's, 17% of which were with Europe. The best bands were 30M and 40M for Europe. For more statistics visit www.clublog.org.

We left several items for the islanders, including the guitar and our generator. For the children, we gifted them toys, clothing, pens, notepads, caps and, for the girls, chains, hair bands and

bracelets. At the PIPA office and the weather observer's house we made and adjusted dipoles so they could communicate with their base in Tarawa and Christmas Island.

There are too many individual sponsors and DX clubs to mention that we must thank that made a financial contribution, but we thank you all! For more information see our website (www.kanton2019.de).

This is one of the DXpeditions that I will not soon forget. The propagation was minimal but the entire adventure was very impressive. 

50 Years Ago A Blast From the Past

**West Coast DX Bulletin
published every week by the Marin County DX Group
September 1969**

"Every weekend is a Labor Day with these unfortunates. Work...Work...Work...for the night and DX is coming. And salty tears tomorrow when the DX came and went... and the poor Marin QRPers missed again. Hear about the ones we missed... \$7.00 for a full year of WCDXB."

"Of each issue it has been said: "...hot in burning love... humble in conversation... a well of flowing doctrine... a pit in deepness of science... and well-smelling in sweetness of fame." Certainly a humble group. Learn of our humility... \$7.00 for a full year of WCDXB."

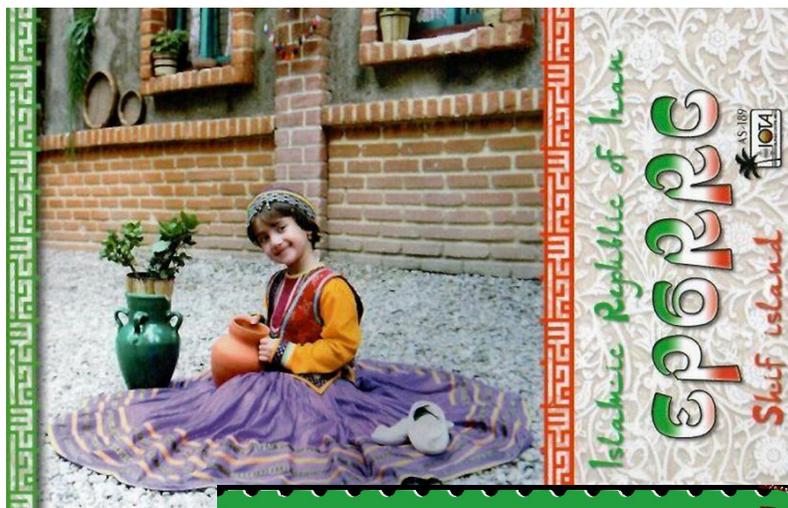
EP6RRC Shif Island, AS-189

Vasily V. Pinchuk, R7AL

WE LANDED AT IRAN'S TEHRAN International Airport at around 0500 local time on 16 November 2018 and, after passing the visa formalities, were met by Mohammad Azimi, EP2LMA, and Ali, EP2AK. There are very strict custom rules in Iran, but Mohammad did an outstanding job before our arrival, which resulted in our passing through Customs without any trouble.

The distance from Tehran to Shif Island was just over 1,000 kilometers, so we rented a big van with a driver plus a second car to use on the island to go for food to nearby Bushehr and for any other reasons. The road trip across the country from the north to the Persian Gulf took more than 15 hours, but it was really interesting and exotic. It was already midnight by the time we arrived at our QTH.

Shif Island is a traditional Persian fisherman's settlement, consisting of a few hundred flat-roofed houses all within close proximity. As there are no accommodations available to rent, we settled in at the house of a local fisherman that he shared with his wife and three children.



Jumping right in

Our whole team was very tired but we immediately began setting up the first station and installed the quarter-

wave vertical for 40M band. It was very dark and without any external lighting in the garden, we used flashlights from our mobile phones. Our first

QSO from AS-189NEW was made on 16 Nov at 2257 UTC with the Belgian station ON4AMC. We kept this station running all night, making the first few hundred stations happy with their new IOTA!

Early the following morning, with the first rays of the sun, we started to build the antennas. Unfortunately, our house was located inside the village and surrounded by other buildings; in addition, it was far from the beach and there wasn't enough space to set up all our antennas so it took some time to find a better solution and place the antennas for the 160 to 15 Meter bands.

The first antennas to be built were the two-element VDAs, so we could have QRV with two high-power stations on 15 and 17 Meter bands respectively. The most difficult to set up was the LF vertical antenna and its long radials. Also we moved the 40 Meter vertical and put it in salt water.



EP6RRC team, from left: Mohsen Hosseini, EP3SMH; Vasily Sukhanov, RA1ZZ; Sergey Galejev, RW5D; Al Pribylov, RZ3K; Mohammad Azimi, EP2LMA; Avinir Sukhanov, UA1ZZ; Igor Livshits, UA3EDQ; Ali, EP2AK; Vasily Pinchuk, R7AL, Mohammad Mobini, EP3MIR, and Vlad Angeli, RK8A.



Shif Island, AS-189 on the air!

Our propagation on HF bands to Europe and Asia was good all day long, but we experienced some difficulties working stateside stations. The most common bands to NA were 20 and 40 Meters, with some good openings on 17 Meters, and we called “NA only” based on the best predictions for stateside.

Before long we discovered a very unpleasant surprise. Every few hours a terrible S-9 QRN covered all the bands and it would last anywhere from 30 minutes to three hours, and this problem haunted us until the end of activity. As we searched for the QRN source, our Iranian friends told us that it was caused by some military activity on the Persian Gulf.

The first night’s noise level on 80 and 160 Meter bands was very high because of the proximity of the power lines, LED lamps and other devices in the village. We tried the EWE-antenna in a different configuration, but we did not achieve the desired result. We also had the idea to hang a short Beverage antenna, but the neighbors were not thrilled with that, so the LF bands were a big challenge, but we did our best for NA and JA stations!

The pileups were really huge and

they didn’t decrease until the very last day of our stay. We perfectly understood that we had not only IOTA-hunters, but also those who were looking for new DXCC band-slots, and all the EP6RRC operators did their best to keep up the good work and achieve the maximum result!

Wrapping up

Seven days passed very quickly and before we knew it, it was time to tear down the antennas and pack up all the equipment. Our last EP6RRC QSO was made on 23 November at 2233 UTC,

just a half an hour before we took our seats in the van, and the start of our long journey home.

This DXpedition was dedicated to the 25th anniversary of the “Russian Robinson Club.” We were lucky to have made 26,000 QSOs worldwide, despite all the difficulties. We enjoyed the endless pileups and meeting new people. It was a really great radio adventure!

The team thanks our sponsors as well as all the individual donors for their trust, encouragement and support of this project. 



NCDXF Director Profile

NAME & CALL SIGN: Rich Seifert, KE1B

PAST CALLS: WN2DLJ (Novice), WB2DLJ (General/Advanced/Extra), WA1YBE

CONTEST CALLS: K6MMM, J87HQ (St. Vincent HQ Station for IARU)

CURRENT LOCATION: Santa Cruz County, CA

WHAT ARE YOUR PREVIOUS QTH'S? New York City, NY (WN2DLJ, WB2DLJ) 1968-76, Westford, MA (WA1YBE, KE1B)

IF YOU'RE WORKING, WHAT IS YOUR CAREER? IF NOT, WHAT WAS YOUR CAREER? Freelance Computer Programmer (1967-70). Studio Recording Engineer (1968-72). Electronic Technician (1972-76). EMI/RFI Engineer (1976-78; Digital Equipment Corp.). Design Engineer on original VAX Computer (1977-79, Digital Equipment Corp.). Design Engineer/Team Leader on first commercial Ethernet products (1979-82). Author of the original DEC/Intel/Xerox Ethernet Specification (1980-82). Senior Consulting Engineer for Networking products (1982-84, Digital Equipment Corp.). Chief Technology Officer (1984-88, Industrial Networking, Inc.). President/Consultant (1988-present, Networks & Communications Consulting; over 200 clients served). Self-employed Attorney (2006-present). Instructor/Lecturer (1986-2002, UC Berkeley, Santa Cruz and Santa Barbara), and Visiting Lecturer (Oxford University, UK). Author of five books on various aspects of computer networking and Founder/Board Member/Adviser of 10 different technology companies, including Juniper Networks (taken public), Mysticom Inc. (Israel), Nishan Systems, Cavium Networks (acquired by Marvell).
Currently "retired," although I still provide legal counsel and expert witness consulting services in technology litigation.

NCDXF LEADERSHIP OR SUPPORT POSITIONS? Current Director

OTHER LEADERSHIP POSITIONS? Author/Editor/Chairman of numerous IEEE committees developing international standards for computer communications systems, including Ethernet, Token Ring, and WiFi (IEEE 802.1, 802.3, 802.4, 802.5, 802.11). Co-Chair of International DX Convention (Visalia, 2015/2017/2019), Former member of the Board of Directors of the Northern CA DX Club, and Current Treasurer, former President and Board Member of the San Lorenzo Valley ARC.

CURRENT DXCC STATUS? 325 worked/325 confirmed (mixed); 318 worked/316 confirmed (CW); 307 worked/304 confirmed (phone), 249 worked/245 confirmed (digital)



DXPEDITION EXPERIENCE? Extensive "Holiday-Style" DXpeditions, including: PJ2/KE1B (Curacao), VP5/KE1B (Turks & Caicos), VP2EAQ (Anguilla, 4 times), 9H3MMM (Malta), EA8/KE1B (Canary Islands), J38MM (Gozo Island, Grenada), V25M (Antigua), J8/KE1B (Bequia Island, St. Vincent), 8P6MM (Barbados), V4/KE1B (Nevis), 9Y4/KE1B (Tobago), FO/KE1B (Moorea and Bora Bora, French Polynesia)

WHAT WOULD YOU TELL SOMEONE WHO IS THINKING ABOUT CONTRIBUTING TO NCDXF? NCDXF is the largest and most respected funding organization for DXpeditions around the world. Dozens of the rarest entities would not have been activated without their support. If you enjoy chasing DX, then it is really your duty to support and encourage the people who make this happen. It's hard enough (physically and logistically) to travel to the most difficult locations to set up equipment. NCDXF provides the vehicle to make it financially possible as well.

AS AN AVID DXER WHAT SORTS OF TRENDS DO YOU SEE? Whether it's for the better or worse, auto-correlated digital modes like FT8 and FT4 have become very popular, and will continue to do so in the light of poor propagation during this sunspot minimum. I am sure that there will be additional such modes made available, all trading off the factors of S/N ratio, bandwidth and speed. While such modes do not really allow conversations, and the opportunity to establish long-term relationships with people around the world, they do allow even the most modest station to make DX contacts that would otherwise be impossible using conventional modes.

It is also becoming obvious that DXpeditions to the rarest entities are becoming both more expensive and more dangerous. The idea of having a drone aircraft dropping a fully-functional station onto a rare island, and operating it remotely either from a nearby ship or over the Internet is becoming more practical every year. This is particularly true in light of the efficiency

NCDXF Director Profile *(continued)*

of the new digital modes, as the “drone station” can use more modest antennas and power, and can be operated 24/7 without providing expensive life support for the DXpeditioners.

ANY TIPS FOR DXERS? First of all, follow the DX Code of Conduct. Learn the etiquette for chasing DX in a pileup. Be patient, and don't get frustrated. Assuming communication is at all possible, you WILL get through if you persevere, especially as the pileups thin out later in the DXpedition.

Learn Morse Code. There are a lot of DX stations that use this mode almost exclusively, and you won't work them if you don't understand what they are saying.

Morse code is probably the most bandwidth-efficient, noise-tolerant mode that can be sent and received without computer assistance.

BE the DX! There are a lot of places that are not difficult to get to, and a simple portable station can attract huge pileups, especially with a good location near salt water. Trust me, it's a lot of fun to be on the other side of the action!

Go the DX conventions, meet the people you are working, and the people who have lots of DX experience, and learn from them.

And don't forget that, regardless of which end of the conversation you are on, it's supposed to be FUN! If it isn't fun, do something else.

DESCRIBE YOUR SHACK AND ANTENNA SYSTEM: I am very fortunate to be located at the top of a 2,000-foot mountain with no nearby neighbors, an S-zero noise floor (40 meters and up), and line-of-sight to the Pacific.

My primary radio is Icom IC-7600 (for everyday DXing and contesting). DXpedition radios include Elecraft K3S, KX2, Icom IC-7000.

1954 Harvey-Wells T-90 Bandmaster (my novice rig), restored in 2010 and used for vintage radio events
Lots of other radios for backup/VHF/QRP, including Kenwood TS520S, Icom IC-756 Pro3, IC-7000, Homebrew QRP.

55' tower supporting Optibeam OB11-5 (17 element interlaced Yagi) for 20/17/15/12/10 meters, Vertical antenna for 2M/70cm, Inverted Vs for 80/160M, 30' tower supporting 5 element Yagi on 6M, 20 element dual-polarization Yagi on 2M, Halo receiving antenna for 6M. Trees (80-foot tall) supporting full-size extended double Zepp on 40M.

Amplifiers: Acom 2000a, Tokyo Hy-Power 1.5Kfx (2) Palstar AT-Auto Full Power autotuners (for low bands).

Fully automated operation for DXing and Contesting using Microham microKeyer-II, computer driven autotuner, computer driven automatic antenna switching.

iMac running MacLoggerDX for DXing, iMac running N1MM+ on VMware virtual Windows machine for contesting.

MARRIED? Not anymore. But Anna W6NN, has been my partner for over 28 years, and we often contest together as a multi-one operation, with lots of plaques and certificates on the wall.

KIDS? GRANDKIDS? Not that I know of.

ANY OTHER HOBBIES BESIDES HAM RADIO? Fine woodworking (cabinetry), Classical guitar and lute (Renaissance and Baroque music). Formerly avid skier and middle-distance runner.

WHAT MIGHT SOMEONE BE SURPRISED TO KNOW ABOUT YOU? I played varsity ice hockey in college (poorly). 

Why use FT8 mode in DXpeditions?

FT8 is rapidly becoming the digital mode of choice for DXpeditions and here are some reasons why:

- Important for little pistol stations, especially in antenna-challenged HOA or high-noise neighborhoods.
- No other mode has the capability of working five different calls in parallel in the same sub-band with queuing.
- Very high rates possible compared to RTTY, which equals more ATNOs in the log.
- Easier to reach certain parts of the world under poor propagation conditions and weak solar cycles.
- Excellent mode for challenging bands like 6M and 160M.
- Still get credit for a digital QSO toward awards, etc.
- May attract new operators or revitalize older ones.
- Excellent mode for hearing- or speech-impaired hams.
- DQRM not a problem.
- Less stressful for DXpedition operators.
- Has tremendous remote operation possibilities.

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. 

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

Ned Stearns, AA7A	Ed Muns, WØYK	Rich Seifert, KE1B
Glenn Johnson, WØGJ	Craig Thompson, K9CT	Charles Spetnagel, W6KK
Tom Berson, ND2T	Rich Haendel, W3ACO	Bob Schmieder, KK6EK
Rusty Epps, W6OAT	Alan Rovner, K7AR	Randy Stegemeyer, W7HR
Al Burnham, K6RIM	Dan White, W5DNT	

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, www.ncdxf.org, and click on "Videos."



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!

Contribution \$ _____

YES! I want to show my support for NCDXF. Send me the following supplies (shipping included):

____ T-Shirt(s) @ \$15 each \$ _____

(indicate size M / L / XL / 2XL / 3XL)

____ Hats @ \$12 each \$ _____

____ Lapel pin @ \$7 each \$ _____

____ Roll(s) of labels @ \$7 each \$ _____

Total contribution & supplies \$ _____

Call sign _____ Name _____

Mailing Address _____

Email _____

Check enclosed or Charge to Visa / MC / AmEx

Card number _____ Exp. _____

Signature _____

Mail to NCDXF, PO Box 2012
Cupertino, CA 95015-2012