THE STORY OF STØR
A beautiful partnership in Juba, South Sudan
Paul Ewing, N6PSE

This story is about more than a DXpedition to a new country. It’s about people. It’s about a partnership and the good things that can happen when people work together toward a common goal. This is our story of the partnership with the DX Friends/Tifariti Gang and the Intrepid DX Group to carry out the STØR DXpedition from Juba, South Sudan, from 22 July to 10 August 2011.

I first became aware of the DX Friends/Tifariti Gang following their two successful DXpeditions to Western Sahara. Following those, they activated Rwanda as 9XØR, a significant achievement as Rwanda had not been active for some years. I remember contacting their webmaster, Roberto Filloy, EA2RY, and complimenting him on the 9XØR website. I was pleasantly surprised when he wrote back, and we started a dialog about DXpedition websites. I also paid an email compliment to Antonio (Tony) Gonzalez, EA5RM, leader of DX Friends; he wrote back and we began to correspond and exchange views and ideas.

DXpedition leaders are always coy about where they will go next. Sometimes we are concerned about another group jumping in front of our plans or, superstitiously, that if we announce our plans, bad luck might jinx them. Tony and Roberto were unusually open with me, and a relationship was born based on mutual trust and respect. Tony shared with me the steps required and the effort to get a license to operate from Palestine and I shared with Tony my own efforts to do the same.

Over the course of several years, I kept in touch with Tony and corresponded occasionally. Roberto, on the other hand, became the webmaster for both the Intrepid DX Group, and our first DXpedition to Iraq as YI9PSE. Roberto has done an outstanding job for us.

A gamble pays off
As DXpedition leaders, we all paid attention to what was happening with the Referendum for Secession in Sudan this past January. We exchanged news headlines and updates and, after the referendum vote passed with 98% voting for secession, I suggested that we form a partnership to activate this new country. Tony agreed to travel to Juba, which would become the

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Now available from our library is the DVD (52 min.) done by James Brooks, 9V1YC, on the VP8ORK expedition to South Orkney. This is an excellent DVD of the expedition which was voted DXpedition of the Year at Dayton in 2011.
From the President’s Desk

This issue of the NCDXF Newsletter is devoted to the STØR story (thanks to Paul, N6PSE) and our three scholarship recipients for 2011.

As we head into the last quarter of the year, the economy continues to be shaky but each of you who contribute to NCDXF continues to do so. We very much appreciate that, as the expedition funding requests keep coming in and we try to honor all of these with various levels of grants. Check our website (www.ncdxf.org) to stay current on what we are doing.

Four contributors have notified us that they have included NCDXF in their estate plans: W6OAT, N4GN, WØGJ and W6OSP. Please take a minute and consider setting up a portion of your IRA assets to go to NCDXF or perhaps part of an insurance or annuity policy.

NCDXF was well represented at a number of conventions this year. Visalia kicks it off each year and if you have never attended an International DX Convention, try to put it on your calendar. Vice-President Glenn Johnson, WØGJ, attended both WØDXCC and W9DXCC. Director Tim Totten, N4GN, also attended W9DXCC. My wife and I attended W4DXCC and we were able to spend a couple of days in the Smoky Mountains. The attendance at this convention was over 180 and the warmth and friendship was heartfelt. The organizers of both W9DXCC and W4DXCC gave part of their raffle proceeds to NCDXF.

This will be my last letter in 2011. I hope that each of you have a great Holiday Season and thank you for your continued support of NCDXF.

— 73, Bruce Butler, W6OSP

STØR (continued)

new capital of South Sudan, and seek to obtain a license from the newly formed Government of South Sudan (GOSS). We agreed to share the costs for Tony’s travel and the license fees.

While Amateur Radio activity was not uncommon in this part of the world, our project would likely be the first Amateur Radio license issued by the new government and there was the real possibility our request for a license would be denied. Given Tony’s track record, I was willing to take that gamble as I was confident that he would come away with a license.

In March 2011, Tony traveled to Juba and, after a series of meetings with the Ministry of Telecommunications, and a significant application fee, was granted an Amateur Radio license. With license in hand, Tony scouted out possible operating venues. We knew that at least one or two other groups were planning being in

Contributions The Northern California DX Foundation relies heavily upon the generosity of its members to fund various projects. We urge each member 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! The 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: Northern California DX Foundation, P.O. Box 2012, Cupertino, CA 95015-2012, USA. You may also contribute and order supplies online via our secure server, visit www.ncdxf.org/donate.
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Planning proceeds

With license in hand, we began to form our teams. We had hoped to have a large team of 18 operators so that we could keep a number of stations on the air 24/7. It was important to plan our activity around the time that the new country would be accepted into the DXCC program but since we didn’t have an exact date, a number of operators were unable to join the DXpedition.

The key question was this: When will South Sudan count as a new DXCC country? We wanted to avoid the situation where we went to all the expense and effort to get this new country on the air and then have the operation not count for DXCC. We worked closely with the ARRL DXCC staff and carefully reviewed the criteria for a new DXCC entity. The ARRL DXCC staff gave us a determination that the new entity could be accepted once the UN admitted it as a member state and/or the ITU assigned a new prefix.

We immediately contacted the UN and reviewed the agendas for the Security Council and the General Assembly. We also contacted the ITU, who advised that a new prefix would not be assigned until after the UN admitted South Sudan as a new country. That simplified things for us; we only needed to follow the UN’s activities.

The civil war continues

A long and protracted civil war in Sudan ended in a truce in 2005. Since then, there had been a number of attacks and border disputes which were increasing in frequency and intensity as we approached our DXpedition date. There were even attacks on UN peacekeepers, which had the real potential to derail UN membership and our plans for a DXpedition.

In late June, the Vice President of South Sudan announced in a speech that UN admission would take place on 14 July. We had long known that secession would occur on 9 July, but we had not expected a UN vote so soon. We knew of several other groups planning to be in Juba upon secession, so we contacted them to coordinate frequencies, much like what was done during the 10-10-10 situation, where four new entities simultaneously came on the air in 2010.

We never expected to be the first group on the air in Juba; instead our focus was to be the most effective. We wanted to have a large and lasting presence, and planned to be active for 19 to 20 days with a large team, but it surprised us to learn that the other Juba DXpedition group was canceling their plans. Now it appeared that we would be the first and only DXpedition in Juba to activate this

*EA7AJR and EA5RM with gear at the Madrid airport.*

*Signs like these were very common in Juba. Photos by AH6HY.*
new country. I must confess, this added even more excitement to our plans.

With the UN vote nearing, we needed to scramble to get our equipment together and build our teams. Normally, the DX Friends carry all of their equipment with them as checked luggage, whereas the Intrepid DX Group ships their equipment to a contact person at the destination ahead of their arrival. Because there were no outlets for FedEx, DHL or UPS in Juba, we needed to carry our equipment with us. We made a list of all equipment available between the two teams and then decided what we would bring. All of the equipment brought on the DXpedition was personally owned by the team members.

Secession and the UN vote
Just as expected, the Government of South Sudan seceded from Sudan on 9 July. This was a significant event for the people of South Sudan and the celebrations were broadcast worldwide. As anticipated, the UN General Assembly and Security Council voted on 14 July to accept South Sudan as its newest member. Later that day, each team member purchased their airfare to Cairo, Egypt, where the DX Friends and the Intrepid DX Group met to fly to Juba together on 22 July.

Arrival in Juba
It is an interesting sight to fly across Egypt and over upper Sudan; the land is desert and the climate, harsh. We landed in Khartoum, Sudan, to refuel. Khartoum is very bleak and barren with virtually no vegetation except at the convergence of the White Nile and Blue Nile rivers. Our five-hour flight to Juba rushed by and, as we came into Juba, we could see that the terrain was lush and green. We saw many small mud and thatched huts in the outlying areas around Juba. There were a number of UN aircraft on the ground in Juba; the UN had a significant presence there.

Once at the terminal, we were confronted by plain-clothes “secret” police who demanded that we stop taking photos and video. We certainly weren’t in Kansas anymore! We learned later that the Sudanese are very sensitive about having their photographs taken, and photography
finding that we could easily work EU and JA stations most of the time. During our daytime and early evening we worked EU and in the early hours of the morning, North America became workable. I really enjoyed working 20 Meters SSB all night long, which corresponded to daytime in the USA, and hearing “thanks for the new one” over and over again. Probably the most difficult region to work from STØR was Australia/New Zealand. While we worked many VK/ZL stations, the distance and the propagation made it tough going. It was also very tough to work the West Coast of the USA and it required other stations such as EU and JA to stand by so that we could pull out the West Coast stations that were calling.

**RTTY record set**

We were quite fortunate to have some very highly skilled RTTY operators on our team: Andy, DH8WR; Jun, JH4RHF, and Tony, EA5RM made a major RTTY effort. The amount of time these guys put into working RTTY and their focus and determination were just amazing. Together, they set a new record for RTTY contacts during a DXpedition of 18,132 QSOs.

Our SSB team consisted of Tony, EA5RM; Dave, AH6HY; Fabrizio, IN3ZNR; Hrane, YT1AD; Krassy, K1LZ; David, K3LP, and myself. Jose, EA7KW, was very busy with 6 Meters and his CW/SSB roles. Fabrizio, IN3ZNR, worked tirelessly day and night and probably worked the majority of EU stations; he also put in a multi-language effort, working stations in Italian, Spanish and English.

Our CW crew consisted of Manolo, EA7AJR; Jose, EA7KW; Valery, RG8K; Dima, RA9USU; Hrane, YT1AD; Krassy, K1LZ; Jun, JH4RHF, and David, K3LP. David could only be with us for a short three days but he operated about 36 hours straight, with great relish and accuracy. He is an operating machine!

Krassy, K1LZ, stayed up all night every night, working 160, 80 and 40 Meters whenever conditions allowed. He made a major effort on the low bands with assistance from K3LP. Dimitri, RA9USU, and Valery, RG8K, made the bulk of the 20/17/15 Meter CW contacts for North America as they stayed up all night each night working all across the continent. Roberto, EA2RY, did a great job developing and maintaining our

**On the air**

Soon the CW stations were on the air and we were amazed at the size and intensity of the pileups. The callers to STØR were 40-50 KC wide on each band; most of us had not experienced anything quite like this. While it was fun, it was quite arduous to work everyone to get the pileups down to a manageable size. Our rates were slow because of the many callers and the QRM. Our shack was also noisy at times, as we were all operating from the same room. Coupled with noise in the area, it was often difficult to pull out all but the strongest of stations.

We quickly settled into routines

**Valery, RG8K, and David, K3LP, work CW, while Dave, AH6HY, does SSB in the background.**

**is prohibited at most public places and government facilities.**

Soon, we had all of our gear loaded into two vans and we drove across Juba to our hotel, where, with great excitement, we unloaded our equipment and set up our antennas. We decided to get the CW stations on the air first as we continued putting up our SSB and RTTY antennas in Juba’s glaring heat.

We were met by the hotel’s general manager who was not aware of our plans, nor of the agreements made with the previous general manager during Tony’s March visit. Fortunately, once assured that the GOSS had approved our plans, he was extremely supportive and cooperative with any request that we had. The Juba Grand Hotel would prove to be an ideal venue for the STØR DXpedition.

(Above) Most of the team preparing to raise the Spiderbeam in the hot South Sudan sun. (Left) The Hex Beams and vertical antennas at STØR.
website and helping us with myriad issues while we were in Juba.

This was a great team effort and everyone was really focused and committed. All of the team members got along well together and enjoyed each other.

Operational challenges

Some of the operational challenges we faced while operating from Juba were daily power outages, environmental noise on the bands and lack of reliable Internet. The climate was also very harsh; when we were setting up antennas the fierce sun and heat made it tough going. Our shack was often very hot, particularly during the days. Our EU team members were used to this kind of heat, but I found it very difficult to endure day after day. Mosquitoes were quite prevalent in South Sudan and we all had to take malaria precautions. Unfortunately, our South Sudanese driver was stricken with malaria during our stay and was very sick for a week.

Every DXpedition has a visit from Murphy, who arrives in the form of bad luck — something breaks, fails or gets lost. At STØR, we were very fortunate that Mr. Murphy stayed away until the end of the trip — the Intrepid DX Group’s equipment was lost in Cairo and it took a few weeks for Egypt Airlines to find it, and the DX Friends suffered a laptop failure and two rigs were damaged.

GOSS officials

Early in the DXpedition, Tony, Hrane and I visited the GOSS Ministry of Telecommunications to thank them, again, for issuing the license to Tony and to make them aware that we had arrived and were now active. An invitation was extended to visit and enjoy a meal together and we were thrilled when the Undersecretary of the Ministry and his Chief Engineer came to our hotel. After a tour of the STØR shack, they listened as we made contacts, amazed at the capability of our equipment. We enjoyed a nice lunch together and exchanged documents commemorating the first DXpedition to the new country of South Sudan. We discussed the Ministry’s ITU application for a new prefix and the Undersecretary said he would welcome our help, indicating that he would like to have “SS” for South Sudan issued. We agreed to meet with his staff the next day to help with the application. At the end of our visit, we took pictures together. It was a very exciting day knowing the path had been paved for future Amateur Radio visits to South Sudan!

On 5 August, the ARRL’s DXCC staff added South Sudan as a new entity to the DXCC list and accepted the STØR operation, something we were thrilled to have just halfway through our DXpedition. It was a great feeling to see all of our hard work and effort to give everyone a “new one” come to fruition.

Juba school visit

Part of the purpose of carrying out a DXpedition is to expose the local people to the hobby of Amateur Radio, something we always try to do when we travel to a destination where Amateur Radio is not present. I visited the nearby Juba Boy’s Secondary Academy and met with the Headmaster, inviting a class of boys to visit our location. The Headmaster was thrilled. He arrived the next day with 24 boys, aged five to 12. The boys marveled at the technology and were amazed that we could talk to people all over the world with such ease.
Everywhere we went kids were eager to talk to us.

South Sudan

South Sudan is a very interesting place, but there is very little infrastructure. Few roads are paved; the power grid is very unreliable; Internet access is very limited and slow, even potable water is scarce. At the hotel, we enjoyed bottled water from Juba, but the hotel’s water supply came from rainwater caught by an elaborate rooftop system that held water in large cisterns. Daily water was pumped up to large water tanks on tall stands; when the water ran out, there were no more showers or flushing toilets for the rest of the day!

The people of South Sudan were very warm and friendly and were jubilant about their break away from Sudan. There is so much excitement about the direction and future of the new country.

English is the primary language in South Sudan, and everyone was welcoming and eager to speak with us. Many told us that they were thankful that we had visited their country.

The Juba Grand Hotel would make an ideal venue for another DXpedition or even a contest effort. The staff is very cooperative and willing.

The DX Friends and the Intrepid DX Group would like to thank the Northern California DX Foundation for supporting the STØR Dxpedition as well as all of our foundation, club, equipment and each individual sponsors or donors for allowing us to carry out this DXpedition.

Where did propagation go?

On 6 August, a large coronal mass ejection (CME) was released from the sun. While the SFI index was 109, the A was 27 and the K was 6; working Europe was still possible, but it was a few days before we heard from stations in North America. On 9 August, an X7 class solar flare was released as we were approaching 120,000 QSOs in our logs. A CME emerged from the blast site and the bands became really difficult to work. This geomagnetic storm caused quite an impact to our propagation. Still, we are very pleased that we were able to make 47,696 SSB contacts, 55,458 CW contacts and 18,132 RTTY contacts, for a total of 121,286 contacts over the course of 19 days.

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A few times, we noticed that small tools and rolls of tape went missing from a box we kept outside our shack and, one day, we discovered why. A wild monkey that frequented the grounds of the hotel ran up to our toolbox, grabbed something from it and ran away!

The STØR first-half team members (left) and (below) second-half team members.
2011 Scholarship Recipients

Michael Almeter, W4MJA, a resident of Marietta, GA, holds an Extra Class Amateur Radio license. He carried a 3.0 grade point average and won the World History award. He served as manager of the football and track teams, and volunteered with Horizon Charity and the Soup Bowl Kitchen.

Almeter has earned both DXCC and WAS while serving as net control for community events. He operates CW at 25 wpm and has found the true excitement of tapping out a CQ at 3 a.m. in CW and being answered by rare DX. His plans include attending UNLV to pursue a career in the hotel/casino industry.

Andre McLuckie, K3AWM, of Wayne, PA, holds an Extra Class Amateur Radio license. He is a graduate of Pennsylvania State University where he earned a 3.62 grade point average. He is an Eagle Scout and has served as a Scout Master since 1988. He chases DX mainly on 20M and experiments with PSK31.

McLuckie is a registered nurse and will attend Purdue University to pursue a Masters of Science in Nursing, and wants a career in family nutrition.

Javen O’Neal, KF7HNI, is a resident of Portland, OR. A student at Cal Poly, he carries a 3.85 grade point average, having achieved both the Dean’s List and the President’s List in multiple years.

O’Neal’s volunteer activities include working at the University’s organic farm and helping with environmental clean-up efforts. He has also volunteered in the Physics and Holography labs at the Oregon Museum of Science and Industry.

In addition to his Amateur Radio activities, O’Neal made improvements to the Cal Poly Amateur Radio Club’s equipment and has recruited and helped license new radio Amateurs. O’Neal will continue his studies at Cal Poly in aerospace engineering with a minor in computer science in preparation for a career in as a spacecraft systems engineer.

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 join NCDXF or renew my membership.
New member / Renewal
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 ..................$_________

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E-mail ___________________________________
Check enclosed or Charge to Visa / MC / AmEx
Card number _____________________________
Expiration ______________________________
Signature ________________________________

Mail to NCDXF, PO Box 2012,
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DXpedition Lending Library

The Northern California DX Foundation has a number of VHS/DVD videos and Microsoft® PowerPoint 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, please visit our website, www.ncdxf.org, and click on “Videos.”