

# BS7H - 2007 DXpedition to Scarborough Reef

**Paul Pescitelli, K4UJ und Tom Harrell, N4XP**  
(Edited for GDXF by Prof. Dr. Uwe Jaeger, DJ9HX)

45,820 QSO's, chased by a Chinese fishing vessel, seasickness in the night, dynamite blasts, long days in the sun followed by great camaraderie, the GOOD, the BAD and the UGLY all in the span of 5 minutes at times, what an experience this was!



The 2007 effort to activate Scarborough Reef was born in 2002 by Paul Pai BV4FH and San Hutson K5YY while in the midst of an operation from Pratas Island. During the period 2002 to 2004 signs of possible approval were repeatedly received but never materialized. BV4FH was able to get Chen Ping BAIHAM involved as the President of the Chinese Radio Sport Association and as the operation's point of contact with the Chinese government. Luckily the government never said "no", they just said maybe at a later date.

It wasn't until early 2005 when BAIHAM advised BV4FH the Chinese Ministry of Foreign Affairs was now involved and permission might be given for a date in October. BV4FH and K5YY decided to initiate more in depth planning and other preparations and asked Tom Harrell N4XP, a veteran of many DXpeditions to join the "team". Bob Vallio W6RGG (veteran of the 1997 BS7H team) and James Brooks, 9V1YC (another well known DX-er) were next to be brought in along with Don Greenbaum, N1DG (another experienced DXer, webmaster and pilot). So far the team had two operators with previous on site experience, backed by a support team with fundraising, logistics, and IT experience.

It was during this time period major sponsors were approached and support was lined up for radios, amplifiers, and antennas; ICOM would provide radios, Stepper would send verticals, Acorn loaned its 1010 amplifiers, Butternut added low band antennas and Heil donated the headsets.

The next step was to add more operators: Mike Mraz, N6MZ, Joe Blackwell, AA4NN, Max Mucci I8NHJ, Paul Pescitelli, K4UJ and Tom Berson, ND2T had

joined the team. As time went on the CRSA added to the team the following: BA4RF, BA1RB, BA4RC, BA1AAX, and DL3MBG. Chin-Ta Ko, BV6HJ, a construction engineer by trade, was also added to build and maintain the platforms designed by Johnson Wong BV4DP as well as keep all facilities running and operating properly. Later, Mike McGirr, K9AJ, joined the team as our onsite doctor.

However, 2005 would end without the promised approval from the Ministry of Foreign Affairs and we moved into 2006. 2006 became 2007 but we kept applying and never gave up hope.

Finally, late in the evening on February 3<sup>rd</sup> while N4XP was talking to BV4FH on Skype, BV4FH received an Email from BAIHAM telling him the Ministry had finally given permission for a spring operation. At that very moment there were no words to describe the feelings both experienced as they both realized that was only ninety days away.

The team was notified and all the previous planning and preparation kicked into high gear. Transportation needed to be arranged, equipment from the sponsors needed to be shipped and a fund raising effort had to commence.

At this point it was also decided to establish contact with the Philippine DX community and the Philippine Amateur Radio Association (PARA). On February 8th the first official announcement was made announcing the DXpedition with a date of late April depending on transportation arrangements and weather. Needless to say the DX world was excited.....



Scarborough Reef -- Lat. 15°07'N, 117°45'E

Many actions started to kick into high gear. 9V1YC started a search for transportation; N4XP initiated a major fund raising effort while N1DG activated the BS7H website.

By the middle of March 9V1YC had traveled to Hong Kong and secured transportation, a working vessel some 75 feet in length named “Deep Blue” with all the resources the team needed. More importantly Deep Blue had traveled to Scarborough Reef many times and was familiar with the uniqueness of the area.



**The “Deep Blue”**

As April approached a major roadblock appeared that could have scuttled the entire operation right then and there. Despite friendly and productive talks with PARA (DU9RG, DU1JMG, DU2JAK and DU1EV) word was received the DXpedition would meet the same fate as the 1997 DXpedition.

The operation needed help from someone who knew all parties involved including those in China and the Philippines. Enter Martti Laine OH2BH. Clearly, at this point the future of the DXpedition was in question, but like a determined solder Martti worked the telephones, Email and Skype around the clock over the next week was able to overcome all expressed concerns and the DXpedition was back on track.

In doing so not only was the fire put out but the team gained another experienced operator, especially one with BS7H experience. Special thanks from the team go to those key players in the Philippines Amateur Radio Association as well as Tim N4GN for his assistance.

Major support was received from NCDXF, INDEXA, ARRL Colvin Award, The Carolina DX Association and the German DX Foundation. Hundreds of individuals donated funds showing the huge demand for BS7.

In late March, N4XP, AA4NN and K4UJ would spend part of the weekend assembling and testing the equipment at the QTH of W6XA. The second week of April N4XP and K4UJ carried the equipment to the freight forwarder to be crated at the Atlanta airport in preparation for shipment to Hong Kong. The team assembled in Hong Kong the weekend of April 21 to find that all the equipment had arrived safely and was already loaded on the Deep Blue by 9V1YC, VR2BG and N6MZ.

Our initial plan was to depart as soon as possible, but suffered several delays and potential cancellations due to additional political hurdles (The BAD), the management team worked diligently to overcome those and was able to set sail on April 25<sup>th</sup> at 0600Z.

During the 3 day trip we experienced some rough seas so Captain Desmond would carefully play “mom” of the ship coaching everyone through the day. At each meal time Desmond would slow the boat and change course to lessen the sway of the boat so we were all comfortable to eat, then back to full steam ahead.

April 26<sup>th</sup> at 0800Z we were intercepted by a Chinese fishing vessel, apparently we had charted a course right through the middle of their fishing territory, after a slight change in course we were back on track for the reef.



**On track for the reef.**

Sleeping on the boat was a challenge due to the constant rocking side to side as well as fore to aft, fall too deep into sleep and you may roll out of your bunk! Then when everyone finally fell asleep we were quickly awoken to sea sick team mates in the middle of the night with dueling barf buckets sliding around the sleeping quarters (The UGLY).



**Inside the reef**

We finally arrived at the north side of the reef just before sunset on April 28<sup>th</sup>; our first sign of arrival was that of a Philippine outrigger trolling around the reef. It was a very surreal scene to be traveling along the open sea and BOOM out of nowhere is hundreds of tiny rocks sticking out of the water. Adrenaline was flowing in the whole team, and now we are supposed to sleep and wait for morning, yeah right.



The conflict of adrenaline and peacefulness of the calm reef staring at us made for some strange emotions, kind of like one of those times that you might should be scared but feel really comfortable at the same time (The GOOD).

The next morning, we continued toward the southern tip of the reef to locate the entrance so we could seek haven from any rough seas that may linger during the operation.

Upon arrival we witnessed a new way to fish, DYNAMITE! We observed a huge splash near one of the fishing boats and could only surmise that they were using an explosive device to shock the fish before scooping them up (The UGLY).



**Platform building team, last rock**

Now the real work, both physical and mental begins. It was readily apparent the team was suffering from cultural differences and it would take immense amount of coordination and nurturing to keep things running smooth, James 9V1YC did an excellent job at managing the tasks at hand.



**Woodrun**

After spending most of the day scouting the rocks, gathering GPS coordinates and getting the first platform built (Rock #2) we would be pressed for time to get the first station on the air before night fall. In a mad rush several operators loaded what they could in the small boat (water taxi) and basically dumped the

equipment and two operators AA4NN and I8NHJ onto the platform at dusk and wished them luck! Struggling through darkness and a myriad of small technical hurdles they were able to get the first station on the air.



**Rock 2 at high tide**

April 30<sup>th</sup>, began with BV6HJ finishing the platform for Rock #4 and several hours later DL3MBG and K4UJ, began assembling the equipment and we put that station on the air on 15M for several hours until regular shift operation to take over.



**OH2BH and BA4RF at Rock 3 at high tide**

### SHIFT DUTY

A word about operating shifts on the reef. Due to the time of the year, high tide and low tide changed quickly and also changed by as much as 25 minutes each day. The morning shift started about 1 hour past sunrise and lasted till shortly after lunch time (5-6 hrs), then the afternoon shift would begin and last until just before sunset, then the long shift began. The graveyard shift would be on the rock for 12-13 hours as it was unsafe due to limited visibility and low tide to change operators in the middle of the night. Needless to say, the operators that were on the night shift were really worn out when the boat arrived the next morning.



W6RG at rock 4

The day began about 5:30am with the morning shower and breakfast. It was breakfast that was the surprise meal of the day, our cook "Little Sister" would make up a big batch of fried eggs, and most mornings we had beans and franks also, yum, comfort food in the middle of the South China Sea, with some instant coffee we all felt great after breakfast and ready to either do our time on the day shift, or tend to the chores that needed to be done. By 7am each morning the water taxi would start its rounds to each rock by dropping off a fresh operator and returning the tired operator to the "mother ship". This process repeated itself 3 times a day, morning, mid day and late afternoon.



OH2BH Martti takes a nap

For the long night time shift one person was designated to stay up all night on the Deep Blue and monitor the HF activity to ensure all stations were operational.

As well this person would monitor the 2M base station in case someone needed assistance with a setting on the radio. BA1HAM took this shift many nights which allowed the other operators to get some much needed rest.



ND2T at rock1

### GIT-R-DONE

May 1 quickly turned into a the day of reckoning (the BAD). This day quickly reached a point where every aspect of setting up and becoming operational became a major roadblock with the limits of each operator stretched.



9V1YC enjoying the pile up



As events unfolded, 9V1YC in an effort to move things along turned to DL3MBG and K4UJ and asked “Can you two have that rock on the air in less than 2 hours?” Emphatically both answered YES and they were off! They quickly launched the water taxi with the radio, antenna, amplifier and gas for the generator and within two hours the station had been assembled and they were putting stations in the log on 15M. There were now two stations on the air and the efforts to make rock #1 operational were underway. Before it was over, this day would truly become the teams most difficult day mentally thus far (The Ugly).

### EXCITEMENT LOOMS



Phillippine fisherman visiting OH2BH on Rock #2.

Whenever you find yourself in unfamiliar territory there is always a chance for something to go wrong. One afternoon while waiting for shift change, the “help desk” received a call on the 2M radio from OH2BH. Two local fishermen had boarded his platform and he could not communicate with them. In a mad dash 9V1YC and K4UJ along with the boat Captain and his first mate would hurriedly race to Rock #2 to scout the situation.



“Little Sister”

After several minutes of attempting to communicate with the fishermen one of them jumped in the lagoon and speared an eel and offered it to us. We could only assume they were trying to barter for gasoline, a much needed resource on Scarborough Reef.



Provisioning the platform

It was then that they finally left, only they decided to board the Deep Blue (The BAD). Standing firm at the top of the deck was N6MZ and by his side was our cook, “Little Sister” hiding her meat cleaver by her side. Those fishermen were not going to board the boat and she was there to make sure of it!

### OPERATING TIDBITS

As with most major DXpeditions there is the question of why did you do that? Why didn't you do this? Well Scarborough Reef is no different. Did we work a lot of JA's, yep sure did, they were right in our back yard, besides who else you going to work in the middle of the afternoon when the rest of the band is dead?



K4UJ at rock2

The night shift operators had the best of times and the worst of times. Remember their shift was often 13 hours long where they would sit lonely on a rock

handing out Q's to the deserving, attempting to make the best of each propagation opening, fighting fatigue and often lonely with only the company of a generator. True isolation, it was scary, surreal and exciting all at the same time.

### SETTING NEW STANDARDS

For this expedition our main goal was SAFETY. Second to that was the obvious make some Q's and have some fun. This activation of Scarborough Reef was the first operation to activate RTTY, 30M, 80M, 160M, first HF Yagi and the first operation to activate 4 rocks simultaneously. Our QSO count of 45,820 almost doubled all previous operations put together.



Team on a rock

In addition, the method of fundraising by using PayPal, and online web donations made it easy for amateur operators worldwide to contribute financial support to the operation and see their donations listed on the website in near real time.

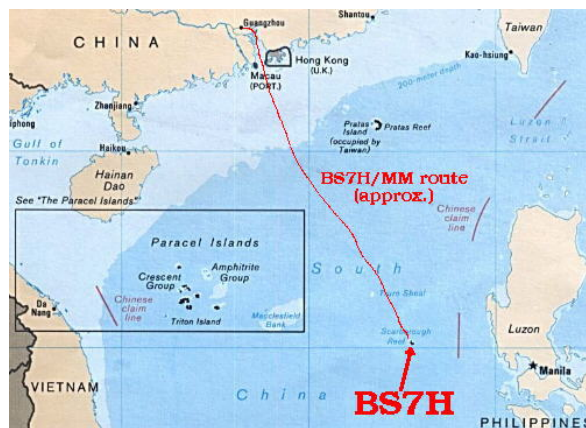


What you really need

There were those that had their doubts about being able to activate one of the most politically sensitive DXCC entities, but in the end we were able to raise the bar once again and announced at HamCom in Dallas that all individuals that contributed would be first

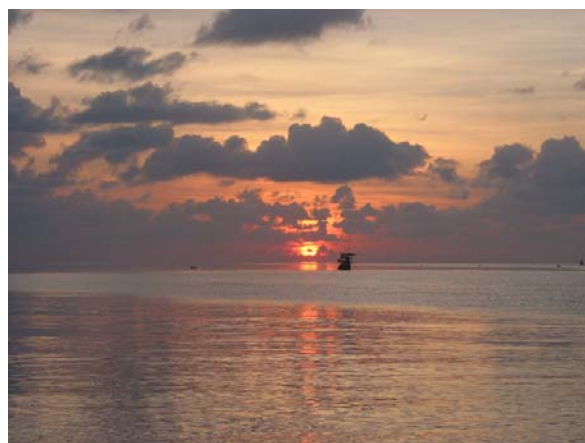
to get their Logbook of the World credits for BS7, this was our way of saying "Thank You" to all those that provided support.

The entire team extends our most sincere thanks to those around the world who worked diligently behind the scenes, and to our equipment sponsors, without your assistance this trip would have been impossible.



### Some statistics

Band	SSB	CW	RTTY	TOTAL
160		54		54
80	121	217		338
40	509	3,039		3,548
30		4,226		4,226
20	10,391	11,435	54	21,880
17	3,325	3,744		7,069
15	4,011	1,985	268	6,264
12	402	474		876
10	841	724		1,565
<b>ALL</b>	<b>19,600</b>	<b>25,898</b>	<b>322</b>	<b>45,820</b>



Sunrise at the reef