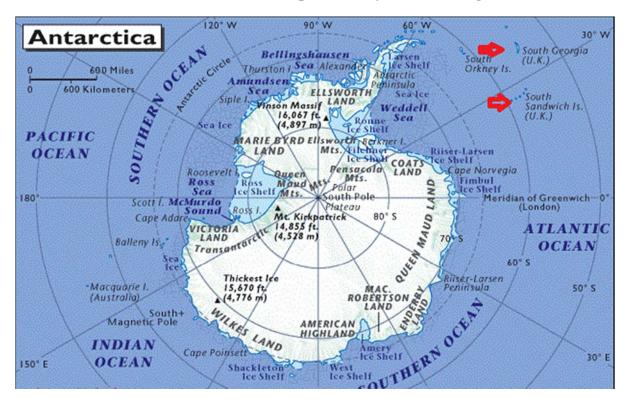
## Two rare activations in the Southern Atlantic.



The VP8STI and VP8SGI Dxpeditions-by Paul S. Ewing-N6PSE

At 59 degrees South, Southern Thule is closer to the South Pole than either Bouvet or Heard Islands.

The Intrepid-DX Group relishes activating the rare, remote and difficult to activate entities. So it was for these reasons that we set out to activate the #3 most wanted entity South Sandwich and the #8 most wanted entity, South Georgia Island.

Due to their relatively close proximity to each other, we always felt that it made sense to activate both of these islands back to back since we were going to all of the expense of chartering a ship and going to that remote part of the world.

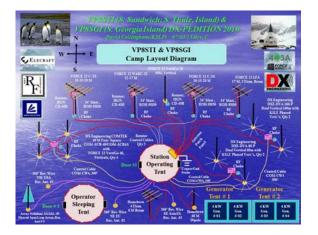
Obtaining permission to land, camp and activate these islands was not difficult. We had to apply for a permit and provide a comprehensive safety and contingency plan. The Government of South Georgia and South Sandwich Islands based in Stanley, The Falkland Islands was very reasonable and engaging unlike many countries that we have deal with. They liked the fact that we had two Physicians on our team as we would be eight days from any external medical help.

Once the approval was given, we set out to charter a worthy vessel and crew. Much to our surprise we found ships based in Stanley that were perfectly willing to charter to South Georgia Island, but none of the ships were willing to go to South Sandwich which is known for extremely rough seas and challenging weather conditions. When I contacted Nigel Jolly, owner of the RV Braveheart, I was thrilled to learn that he was not only willing to charter to these islands but had been there before and welcomed the opportunity to go there again!

We set about to assemble a team of strong operators who had to be in good physical condition. Our CW operators were primarily K3LP K4ZLE K9AJ DL6KVA AA7A N4RR and RA9USU. Our SSB operators were N6PSE W5XU W7XU with JH4RHF K4ZLE AA7A and W5XU doing double duty on CW and SSB. Our RTTY operators were JH4RHF, AA7A, W6DR and W7XU.

We set about to research and acquire tents and equipment that we would need for a polar Dxpedition. We spoke to the leaders and members of previous amateur radio expeditions to these islands to get a complete understanding of what we were likely to face.

Unlike the last expedition to South Georgia, we would not be permitted to occupy either of the buildings there and would have to camp in a tent on the beach.



Detailed plans were made.

We were very fortunate that Elecraft readily agreed to provide us with six of the venerable K3 transceivers as well as their KPA500 amplifiers, KAT500 tuners. We obtained three Expert 1.3KFA amplifiers which we would primarily use on the low bands. Force 12 antennas provided us with Yagi antennas and verticals for 30 and 40 meters. K1LZ produced a set of aluminum verticals for an 80 meter four-square array and phased verticals on 160 meters. DX Engineering provided us with many components and antenna supports to make everything work well together. This Dxpedition could not have been done without this tremendous support!



We tested our polar tents in California before shipping them to New Zealand.

In June, 2015, we shipped a 20' shipping container with all of our gear from California to New Zealand where its contents were placed aboard the RV Braveheart for its voyage to meet us.

Our plan was for all of the team members to begin travelling to Stanley, the Falkland Islands on January 7<sup>th</sup>, 2016.



Just some of our equipment being shipped to meet the Braveheart in New Zealand.

On January 9<sup>th</sup>, we boarded the Braveheart, met the crew and got settled in. We were met at the dock in Stanley by Mike-VP8NO and Bob-VP8LP. Mike-VP8NO had been very helpful to us in obtaining the licenses for VP8STI, VP8SGI and VP8IDX>

All of our gear was stowed and secured. Nigel informed us that a storm was approaching and we would depart in the morning instead of upon our arrival as planned.



Our first view of the Braveheart in Stanley harbor just before boarding.



The Braveheart Crew: Charlie, Nick, Billy, Jason, Neil, Nigel.

At first, the seas were calm and we enjoyed the voyage. We set up a station and antenna and operated as VP8IDX/MM. This allowed us to gauge propagation and to get a feel for what bands would be most available to us when on the islands. Within a few days, we were voyaging along the Drake Passage and the seas became quite rough and dramatic. We often saw large ice bergs as we continued our voyage south.

On January 14<sup>th</sup>, we arrived at King Edward Point, South Georgia where we had to check in with a customs officer and go through a ship inspection. We briefly visited the old whaling village of Grytviken and paused for a moment to pay respects at the gravesite of Sir Ernest Shackleton.



The gravesite of Sir Ernest Shackleton in Grytviken, South Georgia.

We then made the three day voyage to Southern Thule Island, the southernmost island in the South Sandwich chain of islands. We continued to operate as VP8IDX/MM while at sea.



David-K3LP operates as VP8IDX/MM

We arrived at Southern Thule Island on January 16<sup>th</sup>. The Braveheart launched their RIB boat and the crew began to search the coast line for a safe landing place. The crew returned a short time later and reported that

we would need to land in heavy surf. Nigel asked for volunteers to don "Immersion suits" and make a landing attempt. David-WD5COV, Jun-JH4RHF and Ned-AA7A "volunteered" and were outfitted in the immersion suits and soon left to attempt a landing.



David-WD5COV, Jun-JH4RHF and Ned-AA7A don immersion suits to make the initial landing.

I watched through binoculars as the team tumbled through the waves and went ashore. My heart skipped a beat as one of the team members appeared to submerge before stepping up onto the rocks. They had to be cold and wet. Soon, they trekked across the flat area of Southern Thule Island where they found an acceptable landing site. They radioed their position to the Braveheart on the VHF radios.

Soon, the Braveheart sailed around to the other side of the island and the small rigid inflatable boat (RIB) was launched. Ten of the team members were shuttled ashore while three team members remained on the Braveheart to help with the loading of our gear.

The landing on Southern Thule was not for the faint hearted. The rigid inflatable boat (RIB) driver would crash the bow of the boat against a large semi-flat rock right at the water line. Most of the time, this was done between waves. Two crew members stood on the rock and plucked the team member out of the Rib and handed him the heavy blue rope. The team member immediately had to begin climbing up the rocks or he risked being hit by the waves. Very little could be carried while on the rope line. After climbing about thirty feet, there was a landing point. From there, there was a 200 yard walk up a steep incline to a large flat area which would become our camp site.

Getting our gear and equipment out of the boat, onto the rocks and up the rope was a much more arduous task than moving people.



As seen from Braveheart, the RIB boat lands VP8STI team members on Southern Thule Island.

A wave washed over one of our generators as it was being hoisted out of the RIB boat and onto the landing rock. It never did work quite right after that. We had packed our gear so that most of it could be carried by one man but it was still quite difficult getting everything ashore.



The team heaves one of the heavy generators onto the flat rock.

The camp site was amid the ruins of the former Argentinian Science/Research station that was blown up by the British following the Falkland Island war. We had heard a lot about the nasty Penguin poo that covers Southern Thule Island. Fortunately for us, the ground was essentially frozen during our stay and was quite firm and the odor was minimal.

We quickly set up our tents and outfitted our shack. Over the next two days, we would make numerous trips back and forth to the Braveheart to bring over 6,000 lbs of equipment, food, gasoline, propane and tools ashore. Two cases of MREs (emergency rations) were brought ashore and staged at our landing in case they were needed. Fortunately, they were not needed.

The antenna team set up a row of Force 12 Yagi antennas on the edge of a cliff facing to the north. We would have excellent take off angles to Europe and North America. A large mountain is in the path to North America but it did not pose a significant challenge for us. When propagation was good it was if the mountain was not there.



A view of our camp from high up on the mountain.

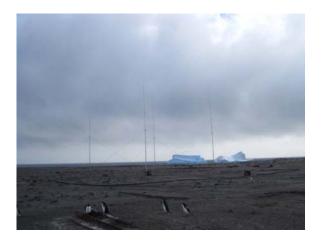
There was a large flat area behind our tents that would provide an area for our 30-meter vertical, 40 meter four-square array, phased verticals on 80 and 160 meters. The ground was frozen during our stay so anchoring antenna guy ropes was always a challenge. We were fortunate to find that our location was virtually free of noise and we did not need to set up our Shared Apex Loop Array or extensive beverage antenna system that we had brought with us.



Our campsite and various antennas.

We got one station on the air as soon as possible, then a second station. The pileups were very large as we waded into them and began to fill our logs. We were challenged by the many out of turn callers that slowed down our ability to hear calls in the clear and to quickly fill our logs. This was a persistent problem throughout both VP8STI and VP8SGI activations. We will be writing about pileup behavior in subsequent articles.

Our Yagi antennas followed propagation as our day started towards VK/ZL, Japan then to Europe and then over to North America later in the day and then ending again at VK/ZL which was our most difficult region to work.



Our 40 meter four-square array with passing ice bergs in the background.

We were fortunate to have relatively good weather on both islands during our first five days. Winds were always strong and it was very cold, particularly at night.

At 59 degrees south, the sun never really sets and it does not get fully into darkness. This was good as we often had to go out day and night and tip up antennas that were blown down or re-secure the tent.



Our camp during the few hours of darkness each night.



Penguins passed through our camp day and night.

We typically saw four seasons within the span of 24 hours. When the sun came up, there was fresh snow on the ground. By mid-day, the sun was out and the ground

was clear of snow. The winds came up in the afternoon and we often saw snow flurries before dark. This was repeated daily until January 24<sup>th</sup> when the first of two storms arrived. Our two primary tents were polar rated however we found it increasingly difficult to keep them clear of accumulating snow and keeping their tie ropes secure in the frozen ground.



The Team troubleshoots a generator issue amid the ruins of the Argentine base.

On what would become our last night on Southern Thule Island, winds increased to 70 knots as reported by the Braveheart. Our tents began to collapse under the pressure of the wind and the weight of the snow.

We had a harrowing evening as we had to physically hold up our tents with our bodies. We regularly cleared the snow and re-secured the tie ropes but it seemed that we were losing the battle against "mother nature". The Braveheart called us on the VHF radio and reported that they were moving out to sea as they were having difficulties in the bay near us. We knew we were on our own and this added to our concern.

The next morning, we had several feet of new snow on the ground. Many of the antennas were on the ground and we had to dig them out to put them back up.



David-WD5COV digging out the camp after several feet of new snow.

Two of our four tents had fully collapsed and were damaged beyond repair. Through all of this we managed to keep a few stations on all night. We were now running at full strength again when we received a call from Nigel on the VHF radio. Nigel declared an Emergency and ordered an immediate evacuation of the island. He asked us to get to the landing rope as fast as possible.

The Braveheart was steaming into the strait between Thule and Cook Island and they saw that a large area of pack ice had been broken away in the storm that previous evening. Nigel feared that the pack ice was going to block the strait and that if that happened they would not be able to get to use for a number of days.



Jun-JH4RHF operates CW as VP8STI.

We quickly turned off the generators and abandoned all equipment in place. We made our way to the landing rope just as the Braveheart arrived into the bay. Soon, the RIB arrived and whisked us all aboard the Braveheart. Most of us were exhausted and welcomed the chance for a hot meal, a shower and a nap in a real bunk.

On January 26<sup>th</sup> at 4AM, we went back onto the island to recover our gear. We had no idea what condition any of it would be. The two main tents were still standing and our gear was safe and dry. Many of the antennas had fallen and were on the ground but at this point we decided to vacate Southern Thule Island after eight days of operating. We had made 54,641 and had hoped to continue for another day, however we agreed with Nigel that the weather and conditions were working against us.

It took eight hours and exhaustive manpower but we packed everything and put it aboard the Braveheart. We took stock of our gear and our people and everyone was willing to voyage to South Georgia Island and do it all again!



Everything brought ashore had to be hauled back down the rock face.



Dave-WD5COV and David-K3LP lug a generator back to the landing point.



The three day voyage to South Georgia Island from Southern Thule Island was not as difficult as expected. We arrived to very nice weather and we were delighted that the landing at South Georgia was very easy. Little did we know what Mother Nature had in store for us in a few days.



Neil, our Braveheart Captain guides the ship through rough seas on the way to South Georgia.

As the Braveheart would be anchored nearby, we decided to break into a day team and a night team taking turns operating in 12 hour shifts and resting on the Braveheart.



We arrived & set up camp with great weather. Little did we know what was coming.

Setting up camp was straightforward and easy. We used most of the same antennas that we had used previously at Southern Thule Island. The Force 12 Yagi antennas endured countless tumbles to the ground with only a few elements that were bent and easily straightened.



Axel-DL6KVA wades into the huge pileups.

We quickly got onto the air and found that propagation was slightly improved over what we encountered at Southern Thule. Our path to EU was across Husvik Bay and over some distant mountains. Our North American path was much more difficult with tall mountains nearby.



We operated easily with few problems. Our environment was extremely quiet of noise except from the wildlife outside.

Our Chief Pilot, Antonio-EA5RM gave us daily reports on how we were being heard and suggestions for bands by time of day. We made a serious effort on six meters with our four element Yagi however no contacts were made on this band.

As with Southern Thule, we uploaded our logs each day to Club Log with our Hughes BGAN terminal. We were on the very edge of the Inmarsat satellite coverage area and the uploads were challenged by their own propagation. We used Iridium phones to keep in touch with our Pilots and our families back at home.

As we experienced at VP8STI, the VP8SGI pileups were very large with many eager to make a contact. Unfortunately, there were also many out of turn callers in our pileups which makes things more difficult and greatly slowed down our ability to work each caller and move on to the next. Many of us made notes on the out of turn callers and we ignored them preferring to work the callers that were respectful to others.

About six days after our arrival, we experienced very strong winds coming down the mountain slope behind us.



Roger-N4RR and Jun-JH4RHF attend to one of our many downed Yagi antennas.

Each day, several of our antenna masts were bent or destroyed. The Force 12 Antennas endured countless instances of crashing to the earth. Each morning, we repaired or repositioned the antennas that fell during the night. Soon, we had quite a pile of bent aluminum and steel antenna masts accumulating on the beach.



Each day the South Georgia winds destroyed our antenna masts.

The wildlife condition at South Georgia was quite different than we saw on Southern Thule. There were many young seal pups and their mothers nursing them. The pups play on the beach and growled at us as we walked past them. There were few Penguins at out site and even fewer young Penguins.



Ned-AA7A, Dmitri-RA9USU and David-K3LP prepare a low band vertical antenna.

Our beach was littered with dead seal pups and it was evident that something within nature was amiss.

Our days on South Georgia started out working Europe on the low bands, then as 30 and 40 meters would taper out, we would continue to work EU on the higher bands. In the late afternoon, we would shift our Yagis to North America and begin to follow the propagation all across the USA.



Roger-N4RR, Axel-DL6KVA and David-W5XU add to the QSO count.

We sometimes saw "spotlight" propagation, particularly on ten meters which would give us strong but brief openings in random areas of North America. Signals from South America were quite strong and could be worked at almost any time. South African stations were also particularly strong. Our most difficult area to work was Asia/Japan and VK/ZL. On the higher bands those openings were very brief just before mid-day on the high bands. Our most difficult contacts were via the long path to VK/ZL. Our short path to VK/ZL was blogged by very high mountains just behind our camp.



One of our phased 160 meter vertical antennas destroyed by high winds.

As night fell, we would work the propagation on 30, 40, 80 and 160 meters. As time went on, our low band antennas would take a terrible beating in the high winds and would be repaired or replaced each morning. We saw a lot of aluminum destroyed on this trip.

We were quite aware of the DQRM taking place during these activations. We made adjustments from day to day to keep our rates up, to work with existing propagation and to ensure that we reached all parts of the world.

As the winds grew progressively worse each day, we took time to secure and re-secure our tent. Our operating was often distracted as the tent walls were caving in towards us as we were trying to maintain our rates with the pileups. We were fortunate to be able to use spare poles and parts from our other tent to bolster the strength of our main operating tent.



We continue to operate as bad weather and high winds approach.

On what would be our last night, high winds and snow took a toll on the main tent. Many of the rods and poles had separated and the tent was losing its strength and ability to resist the high winds. Our night team experienced complete collapse of the tent several times, which understandably made operating quite difficult. At one point, while I was operating, a sudden gust of wind hit the side of the tent very hard. The table tipped over on top of me knocking me back and dumping my K3, laptop, amplifier and tuner to the floor. Operating was becoming quite challenging.

The night team had another harrowing night where the howling winds and the collapsing tent forced them to shut down and move the equipment to the floors. The night team huddled on the floor to stay warm and to avoid flying objects. Once the day team met with the night team and it was decided to conclude radio operations as everything was in disarray and the weather was extreme.



Our tent succumbing to the high winds on South Georgia Island.

When the winds subsided, Jun, Arliss and myself were taken ashore to finish packing our radio gear and to pack away the tent. The night team would get a little rest before returning to take down all of the antennas. When Jun, Arliss and I arrived we saw that most of the Yagis were on the ground, their masts bent over and unusable.

As we were inside the tent packing up our gear, the strong winds returned. We packed as fast as we can before the tent gave out entirely. We stacked all of our gear in their cases at the tide line waiting for the Braveheart's small boat to return. The high winds increased and we could see that one of the sailboats in Husvik Bay was in trouble. The wind had forced them to drag their anchor and they were now on the rocks near the Braveheart. We listened on the VHF radio as they called for help.

The Braveheart had just told us that we would have to wait for the winds to calm before they could come and retrieve us. We were safe but cold laying on top of our tent however the sailboat Windora was in real trouble. The Braveheart quickly launched their small boat and went to the aid of Windora.



The Braveheart crew goes to the rescue of the Windora in Husvik Bay, South Georgia.

The crew of the Braveheart are the bravest men I have ever seen. They placed themselves in harm's way to answer the Windora's call for help.

Within a few hours, the winds subsided enough that the Braveheart could take Jun, Arliss and I off the beach. The ride back to the boat was rough, wet and cold but I could not be happier to get out of that wind.



Each day, the high winds added to our pile of scrap aluminum.

In a few hours, the night team was awakened and everyone went ashore to take down the antennas and pack up our gear. Our South Georgia adventure was over and we would soon be making the five day voyage back to Stanley, the Falkland Islands. We made 82,847 contacts during eight days at South Georgia Island.

The activations of Southern Thule Island and South Georgia Island were very challenging for our team members. We all found our physical and emotional limits. We were often quiet cold and very tired. Most of us were away from home and our families for nearly 50 days. The trip was very expensive!

Most of us found some aspects of the trip enjoyable and we are grateful for the new friendships and the experiences.

After our 36 day voyage, we would return to Stanley where we would then spend six day operating as VP8IDX with an emphasis on 80/160 meters. We enjoyed feeling warmth again and hamburgers and junk food were sought out first thing.

Statistics: The 13 men of the VP8STI/VP8SGI team operated for 16 days and made 137,533 total contacts.

Thank you to all of our Foundation/Club sponsors, our equipment suppliers and our individual donors for supporting VP8STI/VP8SGI. --- Paul N6PSE

Edited for GDXF by Prof. Dr. Uwe Jaeger, DJ9HX



The VP8STI/VP8SGI Team and the Braveheart crew back in Stanley.