Expedition Report – Ski Crossing of South Georgia
Shackleton footsteps. 24-28\textsuperscript{th} March 2013 – Børge Ousland onboard MV Ortelius

Introduction:
Børge Ousland (Norwegian) and co-leader Thomas Ulrich (Swiss) lead a group of five Norwegians across South Georgia. Starting from King Haakon Bay 24\textsuperscript{th} of March, and finishing in Stromness 28\textsuperscript{th} of March 2013. Name of participants were Ola Bromseth, Ola Hensaasen, Marit Figenschou, Thore Skartveit and Ole Moe. The expedition objective was to follow Shackleton historical route across the glaciers of South Georgia.

The route:

Safety:
All participants had glacier experience from before. In Ushuaia port we trained on putting up tents in a controlled environment and during the crossing we also practised crevasse rescue techniques. We followed waypoints provided by earlier expeditions, these worked fine, perhaps except across the Trident ridge. I consider the route we took to be safe this time of year, with minimal chance of avalanche. Also crevasses were mostly visible and easy to cross or avoid this time of year. We had three possible escape
routes with waypoints. One was going back to King Haakon bay, the other was north to Possion Bay and the third was west to Fortuna glacier. We had scheduled contact with the ship via Iridium phones every evening. We also received daily weather forecast from the ship. In addition to two iridium phones we also had two emergency beacon and an InReach tracker. All participants had crampons, ice axes, ice screws and basic climbing equipment. We had 150 metres of climbing rope with us.

Environmental plan:
All rubbish was collected in garbage bags, and human waste in wag bags. This was delivered to the ship in Fortuna bay and sorted for recycling on board the MV Ortelius. We saw three dead reindeers closed to the beach in Fortuna Bay on our walk to Stromness. These were whole carcasses and had not been processed. Apart from that we found a lot of rat poisoning, also on the Fortuna glacier. We saw no garbage at all, except the crashed helicopter at Crean Glacier. I consider our lightweight and short ski-expedition to have no negative impact on South Georgia nature of wildlife.

Summary:
The expedition went as planned and both clients and guides had a very good experience. We had fairly good weather, no injuries or near misses. Even if it was late in the season, we found reasonably good snow cover above 400 metres and were able to use skis for most of the crossing. Safety and environmental plans were followed, no trash of traces were left. I think it also was very valuable for us to visit Grytviken. We had all read Shackletons account, and to see his grave was a special experience. I recommend saving Grytviken in the program for skiers also in the future.

Log Book:

20th of March
Thomas and I boarded the MV Ortelius in Ushuaia. MV Plancius was in the same port, and some of the equipment needed for crossing had already been transferred to MV Ortelius according to a pre agreed list. We used the same afternoon to do as much as possible with the clients, so that they could practice putting up the tents in sheltered conditions. We also divided most of the equipment among the clients before reaching open ocean. This was a good idea since it is a bit more difficult and uncomfortable to do this in heavy seas. During the crossing we also went through crevasse rescue techniques and rope work with the clients.
24th of March
Just before dark we launched zodiacs for ski team landing in King Haakon Bay. We used two zodiacs, one with most equipment and myself, the other with backpacks and the rest of the team. In gale force winds, the drivers found a good beach for landing a bit west of the glacier tongue. Good campsites for our three tents were found a bit further inland. Some fur seals and one huge elephant seal occupied the beach further down. Camp on King Haakon Bay.

25th of March
A bit windy night with some strong gusts, but tent was well secured and held. It was 1,5 km to the glaciers, and since we had sleds we carried two times. It was easy going following a river with melt water coming from the glaciers, strong gusts of winds pushed us up the valley. The glacier was free of snow at the lower parts, so we started with crampons. No major crevasses on route across this ice-tongue that stretched down towards King Haakon Bay. We could put skis on where the glacier flattened out towards Murray Snowfield. Following waypoints we skied across this snowfield in partly whiteout conditions towards Trident ridge. As we came closer to Trident ridge, the skies lifted and we got beautiful weather with almost no wind. The route across Trident was on one of our maps marked down the gully on the north side, to the left of the triangular shaped pinnacle. We had double-checked this route with a guide we met in Ushuaia who had done this trip five times. He confirmed the route on this map and said we must take the gulley to the left of the pinnacle. Naturally we followed this advice, and took the gulley to the left; there was also a small cairn on the ridge here. But the face on the backside was steep and long, up to 40 degrees steep and about four hundred metres long, with rock outcrops further down. It did not really match the description we had read from before and it did not look like a place you wanted to slide down on, even with much more snow. Several crevasses also cut across the face further down. But we had equipment to do it safely, and with 150 metres of rope we lowered down sleds in three steps, and clients also rappelled in three steps. Since we had good weather we had time enough and with very little snow there was no avalanche danger. In heavy snow conditions this route could be dangerous and prone to avalanche. However, when we came down to Crean glacier and looked back we saw that the route to the south of the Trident pinnacle appeared to be much better. A much smoother route, with a reasonably gentle snow slope almost all the way down. So naturally we question if we went down the wrong face, and that we should have gone down to the right of the Trident peak instead. We had completely clear sky, almost no wind, and a full moon that guided us to a good campsite close to the nearest moraine on Crean Glacier. Camp on Crean Glacier.
26th of March
Since we had done 12 hours yesterday we took an easy day and skied for a few hours across Crean glacier in more or less whiteout conditions, but with good ground visibility. We camped close to the Nunatak between Crean and Fortuna glacier when it started to rain. Ski conditions were reasonably good, with enough snow cover. All crevasses were clearly visible and easy to avoid or ski across this late in the season.
Camp on Crean glacier

27th of March
It rained heavily the whole night, but cleared 9 am, just when we were going to ski. Then we also saw the crashed helicopter from the Falkland conflict, just a couple of km further back. We skied back to have a look, before we continued east again. Position of Helicopter is 54.08.54 S 36.58.21 W. Nice weather with good visibility most of the day. Lentil skies and nice sky formations when we came towards the exit at Fortuna glacier. Good skiing all the way down towards the exit. Narrow crevasses at regular intervals all the way down to where the glacier meets the mountains above Fortuna Bay, about 70 – 90 degrees on the course. All safe to cross without rope when on skis. We had been pointed out several alternative exit-routes to Fortuna Bay by previous crossers, most of them going over land, but we found that following the glacier all the way down was the best and safest option. After a short reconnaissance trip, we found a good route. Snow was gone in the lower parts. We moved into the middle of the glacier, close to the moraine, and lowered the sleds down a fifty-meter ice slope. It was not so steep; maybe 30 degrees, and clients could walk on crampons down themselves. Only a few small crevasses further up but nothing difficult. It was easy going down the glacier all the way to the flatlands. Here we put up the tents between the glacier and beach for the last night. We arranged pick up of our heavy equipment with MV Ortelius for the next day.
Camp on Beach, Fortuna Bay

28th of March
10 o’clock the day after a zodiac came to and picked up our equipment from the beach, while we started the walk with light backpacks to Stromness.
Notes:
We agreed on a 1930 call with the ship every day. We also agreed that we should stick to the plan and do a four days crossing. This gave the ship a better opportunity to plan their landings for the other clients, and we could explore the area and enjoy the scenery if we had spare time. I see no reason to have a morning call as well, since we would be in the same spot as last night. Bridge gave us weather forecast in the evening, which was quite accurate and it is good for clients to know what they have in store. There were rat poisoning (green pellets) on the glacier on the east side and more or less everywhere close to the exit, but according to the rat extinction team, there was no danger in drinking the water. Even if it was late in the season, we found reasonably good skiing conditions. We only needed crampons in the lower parts of the entry and exit, and on the rappel down from Trident. Crevasses were clearly visible and easy to avoid this time of year. There is also less risk of avalanches this time of year, unless there is heavy snowfall or a different altitude of course. We connected a single rope to the front black webbing handle of the sled for pulling, instead of the two wires provided. This worked fine and the ropes are still attached. I think this is better when going downhill, then you hold the one rope and it’s easier to guide the sled down. We took three tents, two North Face VE25, and one Helsport Patagonia with double poles. The North face tents were both leaking through the seams in the heavy rain. The Patagonia tent have double poles, are easier to put up and are designed for strong winds. It is a three-man tent, but works best for two in the winter due to all the extra clothing and equipment. We all used the Nordic ski style, not the randonne ski systems commonly used in the Alps. The Nordic back country system worked fine in these conditions, it is lighter and faster than randonne, but both systems can of course be used on a short trip like this. All clients had their own crampons and this is recommended. For the walk from Fortuna to Stromness some had their own trekking shoes, other used rubber boots provided by the ship. I think that rubber boots are fine to walk this last stretch with, besides we also use them for the zodiac landing in King Haakon Bay, and then you don’t need to change boots at the beach there. It is enough with one thermos per person, but everyone should bring a drinking flask for cold water as well. We used the rechargeable tent lights found onboard MV Ortelius and they worked well. There were two sets of MSR pots in the storage, quite small ones. Since we had three tents, the EL provided one more MSR pot. This pot was about 3 litres, double in size, it worked very well, and you don’t need to warm water so many times with the larger pot. We took expedition food for five days each, and had supplied extra personal snacks for lunch in Ushuaia, consisting of potato chips, chocolate, nuts and dried fruit, and some sausage. We calculated 0.25 litres of fuel per person per day and that was plenty. We carried the fuel in MSR bottles found
on MV Ortelius, which is easier than refilling from fuel cans, you just to change bottles when one is empty. Tents were hang up to dry immediately after returning to the ship, and sleeping bags were dried for some days in a warm room before put back in the waterproof bags together with mats.

Børge Ousland South Georgia 2013-04-01