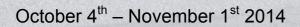
EXPEDITION REPORT

2014 Ski Antarctica South Georgia Expedition aboard S/V Icebird





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Introduction

The 2014 Ski Antarctica South Georgia Expedition successfully completed a high-level ski traverse from King Haakon Bay, via the Kohl-Larsen Plateau, to Stromness. The team then visited Grytviken and St Andrews Bay, and made single-day ski tours from Ocean Harbour, via the Szielasko Icecap, to Godthul, and above Husvik.

Summary Itinerary

TOTAL DAYS	29
Sailing	12
Skiing	7
Lie-Up (Bad Weather)	5
Rest	1
Tourism	2
Other (packing etc.)	2

DATE	LOCATION	ACTIVITY
October 4	Stanley	Preparations
October 5-10	Scotia Sea	Sailing
October 11	King Haakon Bay to Murray Snowfield	Ski
October 12	Murray Snowfield to Esmark Glacier	Ski
October 13	Esmark Glacier to Kohl-Larsen Plateau	Ski
October 14-16	Kohl-Larsen Plateau	Lie-Up
October 17	Kohl-Larsen Plateau to Fortuna Bay	Ski
October 18	Fortuna Bay	Rest
October 19	Fortuna Bay to Stromness	Ski
October 20	Grytviken	Tourism
October 21	St. Andrews Bay	Tourism
October 22	Ocean Harbour to Godthul	Ski
October 23	Husvik	Ski
October 24-25	Rosita Harbour	Lie-Up
October 26-31	Scotia Sea	Sailing
November 1	Stanley	Preparations

Expedition Objectives

The expedition proposed to:

- follow Shackleton's route across South Georgia from King Haakon Bay to Stromness
- approach Mt Paterson from the Salomon and Twitcher Glaciers, making ski ascents of peaks along the route. Return by reversing the route of ascent.

Members

The expedition consisted five ski mountaineers with extensive expedition experience, and three support crew aboard the yacht *Icebird*:



Phil Wickens, 44 (Leader) NATIONALITY: British



Bjorn Riis-Johannessen, 62 (Assistant Leader) NATIONALITY: Norwegian



Dan Harwood, 48 (Skier) NATIONALITY: British



Sylwia Duda, 42 (Skier) NATIONALITY: Polish



S/V ICEBIRD NATIONALITY: Cayman Islands



Benoit Duplay, 53 (Skier) NATIONALITY: French



Cath Hew (Skipper) NATIONALITY: Australian



Steve Dalle-Nogare (First Mate) NATIONALITY: Australian



Brian Bamblett (Crew) NATIONALITY: Australian

Sailing to South Georgia

Icebird is a 9-10 berth 61ft ice strengthened aluminium hulled yacht that was built by Trintella in the Netherlands, one of the very best European yards, and is registered in the Cayman Islands. She has 6 watertight compartments, including a watertight engine room, has her own water-making plant, and is insulated throughout with central heating, making her ideal for expedition



sailing in Antarctica and South Georgia. Her enclosed pilot house with 360 degree vision provides shelter from the elements while on watch, and her hydraulically operated lifting keel can reduce her draft to a mere 1.9 metres and allow access to safe shallow anchorages out of the path of drifting ice, while the 3.3m keel down position means that her highly efficient 10tonne foil with 5

Icebird crossing the Scotia Sea

Photo: Phil Wickens

tonnes of lead bulb ensure excellent sea keeping characteristics and the ability to beat off a lee shore in an emergency. *Icebird* is a member of IAATO (the International Association of Antarctic Tour Operators).

The expedition support team departed Buenos Aires on September 29 and, after five days of reasonable and sailing good conditions, arrived in Stanley on the evening of October 3rd, where the remainder of the expedition team joined the yacht. Sailing out from Stanley on October 5th, we soon got into the swing of ocean sailing, with the skipper and mate operating four hours on and four hours off, and the



Sailing during the early hours en route to South Georgia Photo: Phil Wickens

rest of the team with three hours on and six hours off. Conditions were favourable and relatively comfortable and we arrived at King Haakon Bay six days later on October 10th.

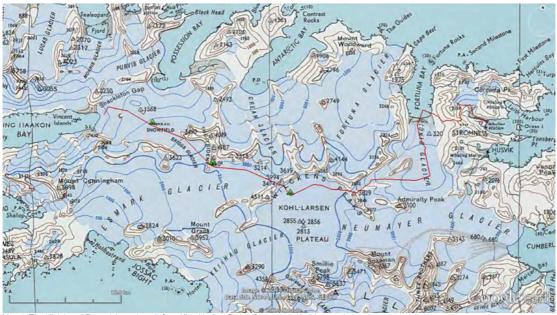
King Haakon Bay – Stromness High Level Route

The traditional route from King Haakon Bay was pioneered by Ernest Shackleton on 19-20 May 1916. Owing to relatively warm conditions and poor snow cover below 1000ft we decided to make a high level traverse to the south, where glacier travel would be safer due to lower temperatures and deeper snow-cover. This route also avoided areas of crevassing on the Crean Glacier and the steep descents from The Trident and Breakwind Ridge, which would be difficult on skis while dragging sleds.

SUMMARY

Route: High Level traverse from King Haakon Bay to Stromness via the Kohl-Larsen Plateau and Konig Glacier.
Date: October 11-19, 2014
Personnel: Phil Wickens, Bjorn Riis-Johannessen, Dan Harwood, Sylwia Duda, Benoit Duplay.

DETAILS



Map 1. The High Level Route (shown in red) from King Haakon Bay to Stromness, showing our three camps

Upon arrival in King Haakon Bay we anchored *Icebird* on the east side of the Vincent Islands, which provided good mooring to rocks and excellent shelter from the westerly swell. We landed on the shore northeast of these islands and, after following a short, easy moraine ridge, were able to continue on skis to the base of the Murray Snowfield, where our support team turned back.

A gently rising traverse led easily through a small pass between the nunataks south of Shackleton Gap to the centre of the Murray Snowfield, where we pitched our first camp (465m). The following morning we continued towards the westernmost point of The Trident and followed the Briggs Glacier, in worsening weather, to pitch our second camp, in thick cloud, on a small pass below the southern end of the Trident (886m).



Camp 2 below The Trident.

Photo: Phil Wickens

Poor visibility continued the following day as we traversed the Esmark Glacier towards the Wilkins Peaks, which we crossed easily via the Zig-Zag Pass. A short descent led down to the Kohl-Larsen Plateau, where we pitched our third camp (935m).

Winds increased and we were unable to move camp for three days

due to very strong winds, gusting at over 100kts during the first day, easing to a steady 50kts during the following two days. The winds then eased and the sky cleared, allowing us to continue across the Kohl-Larsen Plateau. An area of crevassing south of Pk.3895 was passed to the north before continuing

towards a very narrow pass at the head of the western tributary of the König Glacier, between Pk.3545 and Pk.3829. A couple of well-bridged crevasses were crossed to reach the pass, which required a short scramble (15m) down loose rock



Photo: Phil Wickens

and scree to reach snow. The 10km descent down the König Glacier to Fortuna Bay gave excellent and scenic skiing. The crevasses 1.6km east of the pass were well-bridged and presented no problem.

We initially planned to exit the König Glacier via its east bank, in order to avoid crossing the river that flows from the glacier, and then continue towards



Descending the western tributary of the König Glacier (pass on the far left).

Crean Lake. Insufficient snowwould cover have made this difficult and so we descended to snout of the the glacier and then on foot to the beach. where we met the vacht.

Photo: Phil Wickens After a comfortable

night on the yacht and a day's rest we then continued via the standard Shackleton traverse to the Stromness-Fortuna Pass, and then continued northwards along the easy ground below the Henriksen Peaks. A short excursion into the snowy bowl northeast of Thom Peak rewarded us with a super ski descent before continuing past the small lakes to stream that descends into the Shackleton Valley from the north. This was followed easily to Stromness, where we were picked up by Icebird.

Ocean Harbour to Godthul

This short (7km) traverse ascends northwards to the Szielasko Ice Cap. After crossing an easy pass it descends the western arm of the ice-cap towards Godthul before descending steep ground, via the BAS waypoints (marked with cairns and poles) to sea level.

SUMMARY

Route: Ski traverse from Ocean Harbour to Godthul via the Szielasko Ice Cap. Date: October 22, 2014 Personnel: Phil Wickens, Bjorn Riis-Johannessen

DETAILS



Map 2. The ski traverse from Ocean Harbour to Godthul.

We anchored overnight in Ocean Harbour and were dropped off at the head of the fjord at the site of the former whaling station. The head of the valley has

branches: two we followed the northern branch and ascended a small stream to the east of the main valley. This led to a small shoulder, from where we ascended steeper slopes to reach the base of the north-east section of the Szielasko Ice Cap. This



Photo: Phil Wickens

was ascended northwestwards to another shoulder below a prominent peak and opposite an obvious pass to the west section of the ice cap.



Ascending the eastern Szielasko Ice Cap

Photo: Phil Wicke

Crossing the pass to the western Szielasko Ice Cap Photo: Phil Wickens

The pass was reached by a short traverse, from where we easily reached the western ice cap. The ski descent of this, in a northerly direction to its terminus, was straight forward and enjoyable. A short ascent took us to BAS waypoint



50, where skis were removed. The descent of the steep above ground Godthul, via Waypoint 51 and around several steep bands. rock on foot was and relatively easy. Once we reached

At the start of the descent to Godthul

tussock grass we were able to traverse easily to the east to reach the ruined hut and whaleboats on the beach (BAS waypoint 49), where we were picked up by *Icebird*.

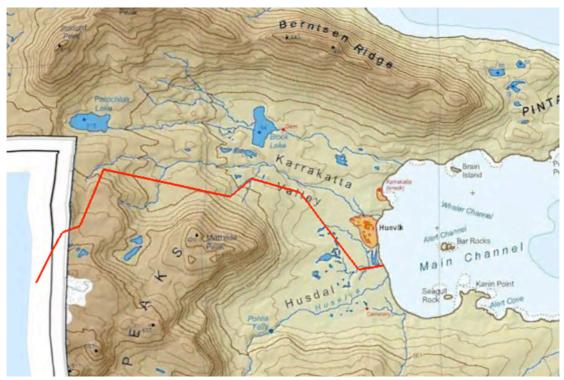
Husvik Ski Tour

This short (4km each way) ski tour enters the Neumayer Peaks from the north and then climbs to a high pass that overlooks the Fortuna Glacier. A traverse was then made to a small ice-cap, from where there were good views of the Allerdyce Mountains, and above which are several summits that could be easily reached in good weather.

SUMMARY

Route: Ski traverse from Ocean Harbour to Godthul via the Szielasko Ice Cap. Date: October 23, 2014 Personnel: Phil Wickens, Bjorn Riis-Johannessen, Dan Harwood, Benoit Duplay.

DETAILS



A large drop of fresh snow allowed us to put skis on at the beach. We followed the beautiful Karrakatta Valley around Mathilde Peak to a small plateau and



which stream. were crossed to reach a spur further west. This was climbed and another followed stream southwestwards to the northern enter section of the Neumayer Peaks.

Enjoyable ski touring took us to a high pass

Ascending the Karrakatta Valley towards Neumayer Peaks



Fortuna Glacier and gave excellent views of Breakwind Ridge. continued We southwestwards to reach a small icecap, which gave good views of the Allerdyce Mountains. Although a number of attractive summits could easily be reached from this

that overlooked the

Traversing the small ice cap in the Neumayer Peaks.

Photo: Phil Wickens

point, very strong gusts of wind meant that retreat was the best option. Descent was via the route of ascent.



View of Husvik from the Neumayer Peaks

Photo: Phil Wickens

Our safety plan consisted:

- Experience & Fitness. The group were all ski mountaineers with previous expedition experience. All were reasonably fit and had completed a medical questionnaire and signed medical advisors opinion.
- Group Size. Our group size of five, combined with the members' experience, allowed us to safely operate as two groups in the event of an emergency.
- Medical. We carried a very comprehensive medical kit on the yacht, plus two small field medical packs within the ski party. Three members of the team had wilderness first aid qualifications.
- Communications. We carried two satellite phones and one VHF radio. The yacht was sent a text message every evening with details of location, condition of party and intentions, and was replied to with the latest weather forecast.
- Contingency. We had planned in detail three different routes from King Haakon Bay to Stromness, which would allow us the necessary flexibility in case of inadequate snow cover, high temperatures, crevasse danger, etc. In addition we had identified two emergency exit points in case of medical emergency, accident or prolonged bad weather. We each carried an additional comfortable five days of food in case of a forced lie-up, three of which could be used for local exploration from our camps in case of good weather.
- Personal & Group Equipment. We compiled an equipment list while planning the expedition for both personal equipment and group equipment, and ensured that every member stuck to this. Our tents were 5-season expedition tents with snow valances, and every member used a bivvy bag incase of loss/ damage to the tents. The team had sufficient equipment for glacier safety, crevasse rescue and avalanche safety. Each member dragged a lightweight sled and equipment was split between this and their rucksack.

Our safety plan was adequate and successful. We were able to take a different but pre-planned route due to mild conditions. This allowed us to stay high, where temperatures were lower, snow-cover greater and crevassing less serious than at lower altitudes. We were also able to sit out a three-day storm in relative comfort and safety.

Environmental Plan

Our environmental plan was adequate and performed well, resulting in minimum impact to the environment of South Georgia. Prior to landing, all expedition members were fully briefed regarding conduct ashore, all clothes and outdoor items were inspected for biological media, the yacht and personal possessions were fully inspected for rodents, and boots and ski sticks were cleaned and sterilised with Vircon between each landing. Human waste was deposited only on glaciers in snow-pits deeper than 1m, and covered after departure from each camp. All other waste was packed out to the yacht for disposal in the Falkland Islands. All yacht waste was transported back to the Falklands for disposal, except for grey and black water, which were disposed of in open sea.

Since all camping and the majority of travel were conducted on snow we had minimal impact to vegetation or of disturbance to wildlife.

Unusual wildlife observations (one insect and one area with rodent tracks) were immediately reported to the Government Officer at King Edward Point. In each case there was no cause for concern.

Expedition Application & Processing

The application procedure was straight-forward and effective at ensuring expeditions are adequately planned and prepared. The cost of visiting South Georgia as a yacht-based expedition is very high, particularly for undertaking a ski traverse of only a few days, with separate harbour fees, customs fee, visitor fees and expedition fee totalling over £2000 for our team of five. It would be easier if the expedition fee was a single charge that covered all aspects of the visit.

Each expedition member was asked to bring their £200 visitor fee in cash. Most members expected to be able to change currency in the Falklands, but since the flight arrived on a Saturday and we departed on Sunday, this was not possible since the bank was closed. It would be helpful to stress this in the Information for Visitors document. It would also be useful if payments could be made on an individual basis by electronic transfer or in US Dollars and Euros.

Weather & Conditions

The weather during our time in South Georgia was typical for the time of year, with winds associated with depressions and frontal systems passing the island from the west, followed by short periods of higher pressure and more settled weather.

When we arrived in South Georgia the wind was light to moderate from the south-west for the first two days due to a high pressure system to the north. This was accompanied by complete cloud cover at 1500ft. Although we were



able to operate safely ashore, we spent most of our time in thick cloud and had to navigate by map, compass and GPS. The wind then became westerly as a weak depression passed to the south, veering to northerly as a warm front passed.

A high pressure system to the south

and low to the north produced strong easterly winds, which created violent katabatic gusts of over 100 knots. This then became a steady 50knots from the west. Once this had passed we were rewarded with a period of high pressure and light southerly winds that lasted 4 days, but becoming increasingly cloudy at 2000ft. This was followed by another brief clear spell before strong winds again blew from the west as the next depression approached to the south.

Clothing and Equipment

The climate of the South Georgia in summer is similar to that in Scotland in winter. Frequent storms bring high winds, snow, sleet and rain. Temperature generally ranges from -5°C to +5°C at sea level, dropping to about -5°C on the



The tents provided by Helsport proved to be ideal for the expedition

and when leaving the tents during the day.

Kohl-Larsen Plateau. Clothing was selected that was suited to these damp, cool conditions.

We used two sturdy Fiellheimen X-treme mountain tents that were kindly provided by Helsport, pegged with bamboo lengths. These tents have snow valances, which we felt gave extra peace of mind in blizzard conditions

The high temperatures mean that snow is usually deep and wet so skis were essential for almost all glacial travel. Due to crevassing and soft snow conditions, virtually all glacier travel was carried out roped up unless descending on ski. All members used alpine touring skis with Dynafit TLT bindings.

When transporting food/ fuel/tents to camps we distributed loads between rucksacks and smooth sided waterproof haulbags, which we used as sleds. We towed the haul-bag sleds from the base of our rucksacks by means of a cord passed through a length of touah plastic pipe, which



Towing haul-bag pulks across the Konig Glacier using alpine touring equipment.

Photo: Phil Wickens

provided enough stiffness to stop the haul-bag sled fouling our skis during descent. A swivel joint between the haul-bag and the cord allowed the haulbag to rotate, and avoid twists and tangles. This system worked very well and was sufficiently durable for this trip.

Food & Cooking

Cooking was undertaken using MSR Reactor stoves powered with propanebutane gas, which proved to be reliable and extremely efficient. All mountain food was purchased in Buenos Aires and Stanley, except for freeze-dried mountain meals that were brought from the UK.



We made up a plastic barrel containing 10 days food and gas for the whole team, and this was depoted every time we went ashore in case we were trapped ashore by bad weather, which is a real possibility, particularly on longer trips away from the shore.

All water was obtained by melting snow. Since this is a particular drain on fuel, we used solar stills to melt as much water as possible inside and outside the tents during the day. This consisted of an Ortlieb Water

Sack filled with snow, and this system proved to be very efficient indeed.

Communications

In addition to the SSB radio, VHF radios and satellite phone on the yacht, the shore party had two VHF radios and two satellite phones. We arranged a primary satellite phone schedule between the skiing team and the yacht every day at 21:00hrs, and a secondary schedule one hour later by satellite phone in case communications couldn't be established during the primary schedule. In addition, the yacht stood by at all times on Channels 16 and 13, and their satellite phone was always turned on. During radio schedules the climbing team summarised their current situation by text message, including latitude and longitude if the camp was moved and intentions for the next day.

Communications were generally excellent and we were able to communicate most of the time by satellite phone.



Crossing from Fortuna Bay to Stromness above Crean Lake, with the peaks of the Allerdyce Range behind.

Photo: Phil Wickens

We would like to thank the following for their help and support:

Our skippers, Cath Hew and Steve Dalle-Nogare

