The Pursuit of Endurance
On the Shoulders of Shackleton

Pax Arctica Expedition
Oct 5 – Nov 15, 2014

Expedition report prepared for:
The Government of South Georgia and the South Sandwich
PAX ARCTICA Shackleton Expedition 2014

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• Date: February 8, 2016

NOTE: This report is comprised of a 3-pages summary as well as excerpts from the book by Luc Hardy ‘The Pursuit of Endurance’, published in 2015 by Pax Arctica (http://www.paxarctica.org/). The book is in French and English so we have kept the excerpts in both languages.

The Pax Arctica expedition: In October 2014, a Franco-British team of nine professional adventurers, military personnel, and serious sportsmen and women with various backgrounds and ambitions embarked on an arduous 5-weeks historical, scientific and personal challenge. The goal of this adventure was to celebrate the centenary of the start of the historic Endurance expedition led by the legendary Ernest Shackleton in 1914 on the outskirts of Antarctica.

This Pax Arctica expedition had two main objectives:

• To partially retrace [for inspiration only, with no claims of re-enactment] Shackleton’s 800-mile route between Elephant Island and the island of South Georgia (including climbing/trekking across the island as his group did).
• To collect scientific data, including oceanographic (CO2, temperature, salinity, current, etc.) and snow samples.

The expedition also provided a framework for athletes (mountaineering and snowboarding/freeriding) and military personnel to achieve unprecedented athletic/mountaineering/adventure performances.
The Pax Arctica expedition also included a cameraman and photographers to capture the exceptional images and stories about this once-in-a-lifetime adventure in a region of fossil-rich islands, gigantic icebergs and stunning Antarctic landscape. The expedition has produced social media communication and filming, a book (http://www.paxarctica.org/the-pursuit-of-endurance/), blogposts, press articles and TV news content. Because of the exceptional quality of images filmed, a 52 min documentary was also produced after the expedition (http://ow.ly/Ny7eM). This expedition was sanctioned as a Flag Expedition of the Explorers Club of New York of which Luc Hardy is a member (Flag #176).

Voyage Dates: October 9 (Ushuaia) – November 12, 2014 (Falklands)
The expedition lasted approximately five weeks, from October 9, 2014 (Starting in Ushuaia) until November 12, 2014 (arrival at Stanley – Falklands)

Itinerary:
Ushuaia (Cape Horn, Drake Passage) — Elephant Island — South Georgia (SG) — South Sandwich (SS) — South Georgia — and then Stanley/Falkland Islands.

Shackleton Crossing on South Georgia Island: 3-days/2-nights, in 3 legs, over a 10-day period. Due to weather conditions, the crossing had to be made in three different sections.

Expedition Leader: Luc Hardy (USA and France)

Team Members: (9 crossing + 3 support vessel captain and crew)

Dates Overview:
Ushuaïa: October 7-9
Puerto Williams (Chile): October 9-14 (long stay due to very strong winds)
Leaving for Elephant Island/Crossing Drake Passage: Oct 14-17
Anchoring and landing at Elephant Island – Cape Lookout: Oct 17
Elephant Island – landing at Point Wild: Oct 18
Sailing to South Georgia: Oct 18-22
South Georgia Island: Oct 23-28
South Sandwich Islands: Oct 29-30-31
South Georgia Islands: Nov 2-7
Falklands Islands: Nov 12-13
Route Description:
Because of severe weather conditions at times, the crossing of South Georgia Island was accomplished in three legs:
Oct 22-23: King Haakon Bay – Possession Bay
Nov 5-6: Possession Bay – Fortuna Bay
Nov 3: Fortuna Bay – Stromness

Expedition Equipment:
Tent (tipi tent) and backup tent.
Pulkas
Backpacks
Skis + skins

Communications:
We carried two satellite phones for communications with Australis (support vessel) and our weather forecaster/router in Chamonix, France.

Navigation:
Most of us carried GPS devices (Garmin, InReach) with route and escape route waypoints/routes entered.
Introduction

• In the heart of the Antarctic, nine adventurers are about to live an extraordinary story. They come from very different backgrounds, but one thing brings them together: a passion for adventure and testing the limits.

• For this expedition, I assembled a true “dream team” not only was our team highly capable and skilled, but they also allowed me to fulfill my own dream of following in the footsteps of explorer Ernest Shackleton. Ben, a friend and polar guide extraordinaire, helped me select an eclectic yet cohesive group of energies, passions and expertise. Each member offered a range of life experiences, having worked as top professionals, explorers, mountaineers, soldiers, mariners and scientists, all with a common goal: to make our fellow humans interested in these parts of the world and its history, and aware of the effects of climate change in this region.

• The Pax Arctica initiative was created to promote awareness of the threats facing the Arctic regions, to convey a global message of peace and to support the introduction of new ecological regulations for the Arctic region.
Summary

IN THE HEART OF THE ANTARCTIC, NINE ADVENTURERS ARE ABOUT TO LIVE AN EXTRAORDINARY STORY.

They come from very different backgrounds, but one thing brings them together: a passion for adventure and testing the limits. **THEIR GOAL:** to follow in the footsteps of one of the greatest legends of the golden age of polar exploration: Ernest Shackleton. In 1914, after the sinking of his ship The Endurance, this hero saved his entire crew from a certain death. 100 years later our expedition sets out to explore the sub-Antarctic islands of Elephant, South Georgia and the South Sandwich by boat, ski and pulka. On board the Australis: an expedition leader, a veteran explorer, a former officer, a skipper, a polar guide, a scientist, two young soldiers and an athlete snowboarder. An expedition to remind us of the fragility of this highly endangered ecosystem, and to improve our understanding of these remote expanses. With them, you will relive the best but also the most challenging moments of this great adventure.
The Team

FOR THIS EXPEDICTION, I assembled a true “dream team;” not only was our team highly capable and skilled, but they also allowed me to fulfill my own dream of following in the footsteps of explorer Ernest Shackleton. Ben, a friend and polar guide extraordinaire, helped me select an eclectic yet cohesive group of energies, passions and expertise. Each member offered a range of life experiences, having worked as top professionals, explorers, mountaineers, soldiers, mariners and scientists, all with a common goal: to make our fellow humans interested in these parts of the world and its history, and aware of the effects of climate change in this region.

THE PURSUIT OF ENDURANCE

IN OCTOBER AND NOVEMBER 2014, our journey involved traveling over 3,000 miles across the wild Southern Ocean. We found ourselves sailing, hiking, climbing, snowboarding, flying drones, and filming from a helicopter, from the tip of Tierra del Fuego, through the furious Cape Horn, to bleak Elephant Island and severe South Georgia, traversing its rarely visited glacial expanses. Always keeping in mind the underlying historical thread of our voyage, we explored, observed, collected snow samples, and launched 11 free-drifting profilers and floats to complement scientific data in this region and help researchers tell us what our future holds.

La Poursuite de L’Endurance

EN OCTOBRE ET NOVEMBRE 2014, nous avons réalisé un périple de plus de 4 000 km à travers l’océan Austral. Nous avons navigué, marché, escaladé, fait du snowboard, piloté des drones et filmé d’un hélicoptère, depuis la pointe de la Terre de Feu jusqu’à la ténébreuse île de l’Éléphant et l’austère Géorgie du Sud dont nous avons traversé les étendues glaciales rarement visitées, en passant par le furieux cap Horn. Ayant toujours à l’esprit le fil conducteur historique de notre voyage, nous avons exploré, observé, collecté des échantillons de neige et mis à l’eau onze profils et bouées dérivantes pour compléter les données scientifiques dans cette région et aider les chercheurs à prédire de quoi notre futur sera fait.
MY TRUE PASSION IS scientific eco-exploration. I am always consumed with a never-ending desire to wander through and inspect remote lands. But when almost every corner of the world has been discovered, for me, adventure is not about trying to go faster and further, or exploring new territory. It is as much about the thrill of the unknown as it is about making each journey meaningful.

When I first learned of the Endurance expedition and the hardships the crew encountered, I knew that Ernest Shackleton was a man I needed to know more about. It has been said before that if you want to understand someone, you should walk a mile in his or her shoes. Instead, we sailed 3,000 miles across the Southern Ocean. Although no one can fully understand Shackleton’s journey, we certainly felt we were able to relive some of the emotions and obstacles he and his men experienced 100 years ago. Leading the expedition also helped me to understand the historical and environmental significance of our journey.

I am lucky that I am able to organize among the most exhilarating adventures on the planet, but this skill comes with a desire and duty to share what I have learned. One hundred years after the Endurance expedition, I am finally able to follow in Shackleton’s footsteps, and demonstrate through film, photography, and writing, our remarkable experience.

Somehow, we felt as if we were there in 1914, alongside Shackleton’s crew as they crossed South Georgia Island. In 2014, the nine of us confront obstacles of our own. We march through severe blizzards, build an ice wall for protection from violent storms, and descend immense glaciers, always pushing ourselves forward despite the danger that may lie ahead. With each arduous step, I take in the Antarctic’s solemn, vast beauty, remember Shackleton, and know we are moving in the right direction.

I am an eternal optimist. This trait has served me well, in both my business life and my adventures. In both cases I try not to know too much, feeling that otherwise I could find reasons to renounce and not move forward. Yet, when I reflect about our changing environment, I can’t help thinking, “what if it were worse than we think?”

Quand j’ai découvert pour la première fois l’histoire de l’expédition de l’Endurance et les obstacles que l’équipage a dû surmonter, j’ai voulu en savoir plus sur Ernest Shackleton. L’adage dit que pour mieux connaître quelqu’un, il faut marcher un mille dans ses chaussures; c’est plus de 5 000 kilomètres que nous avons parcourus en bateau à travers l’océan Austral. Bien que personne ne soit capable de véritablement prendre la mesure de ce qu’a été le périple de Shackleton, nous avions l’impression que nous pouvions revivre certaines des émotions et épreuves que lui et ses hommes ont connues 100 ans auparavant. Le fait de mener cette expédition m’a également aidé à saisir la portée historique et environnementale de notre voyage.


Je suis un éternel optimiste. Ce trait de caractère m’a été utile à la fois dans ma vie professionnelle et au cours de mes aventures. Dans les deux cas, j’essaie de ne pas en savoir trop, sentant que sinon je serai tenté de renoncer et de rebrousser chemin. Pourtant, quand je pense à notre environnement qui se transforme, je ne peux pas m’empêcher de penser : “et si cela était pire que ce que l’on croit ?”
Australis, our Endurance
The right tool for the job

L’Australis, notre Endurance
L’instrument qu’il nous fallait
WE SPEND ALMOST FIVE WEEKS AT SEA, and it is essential that we have a
great boat and a trustworthy captain. It is very important to be able to rely
on the boat’s crew, as Australis is often our support vessel while we are at
risk in the mountains.

For this expedition, I researched boats two years in advance. I needed a
boat and mariners capable of crossing the Drake Passage and navigating
the polar waters of the Southern Ocean. I interviewed nine captains and
boat owners with such capabilities. The boat needed to have all the features
necessary for such a complex expedition, but more importantly, the skipper
of the boat would need to be very experienced and trustworthy. I wanted the
kind of boat that could have been used by legendary explorers, but with an
ice-strengthened steel hull and state-of-the-art navigation and safety equip-
ment, to ensure that our exciting voyage would also be much safer than
what explorers like Shackleton and his crew endured a century ago.

Australis is my final choice. It is a real workhorse of a boat, capable of
handling virtually any difficult or complex situations that can occur in these
parts of the world. The boat was originally built for this kind of scientific
polar expedition. It is not a beautiful racing yacht, but as our skipper Ben
said several times, it is definitely the ‘right tool for the job.’

THE AUSTRALIS IS A FULLY EQUIPPED, 75’ steel-hulled motor sailer. Although a sailboat, she has a train
engine that we are able to use when we need to make time or sail against the wind. She is purposely
built for high latitude and glacial waters expedition sailing, and is fully equipped to carry our group of
nine adventurers and the crew of three. For an expedition vessel, she is relatively luxurious. The skipper,
Ben, operates Australis year round, bouncing between summer in the southern polar region from
October to April, and summer in the northern polar region from July to September.

NOUS PASSONS CINQ SEMAINES EN MER, il est essentiel d’avoir un bon barque
et un capitaine digne de confiance. Nous devons pouvoir compter sur l’équipage du
bateau, l’Australis jouant aussi le rôle de navire de soutien quand nous prenons des
risques en montagne.

Pour cette expédition, je me suis mis à la recherche d’un bateau deux ans à l’avance.
J’avais besoin d’un navire et de marins capables de traverser le passage de Drake et de
naviguer dans les eaux polaires de l’océan Austral. J’ai interviewé neuf capitaines et pro-
priétaires de bateaux ayant potentiellement de telles capacités. Le bateau devait répondre
tous les critères nécessaires à une expédition si complexe, mais plus important encore,
le capitaine du bateau devait avoir beaucoup d’expérience et être fiable. Je voulais le type
de bateau qui aurait pu être utilisé par des aventuriers légendaires, mais avec une coque
en acier conçue pour résister à la glace et un équipement de navigation et de sécurité de
pointe. En effet je devais m’assurer que notre excitant voyage serait bien plus sûr que ce
que des aventuriers comme Shackleton et son équipage avaient pu vivre il y a un siècle.

C’est sur l’Australis que s’est finalement porté mon choix. C’est un bateau résistant à
toute épreuve, capable de se mesurer aux situations difficiles qui peuvent survenir dans
ces parties du monde. Le bateau a été originellement construit pour ce type d’expédition
scientifique polaire. Ce n’est pas un beau voilier de régate mais, comme l’a plusieurs fois
répété Ben notre capitaine, c’est définitivement « l’instrument qu’il nous fallait ». 
THE ENDURANCE HEELING OVER

“Suddenly the floe on the port side cracked and huge pieces of ice shot up from under the port bilge. Within a few seconds the ship heeled over until she had list of thirty degrees to port.” — Shackleton, SOUTH. The Endurance sunk on November 21, 1915. Eventually Frank Hurley, the Endurance photographer, will be able to rescue most of his photographic plates from the sunken ship.

L’Endurance en train de chavirer

“Soudain, la banquise s’est fissurée côté bâbord et des énormes morceaux de glace ont jailli de sous la caisse. En quelques secondes, le bateau s’est mis à fléter considérablement jusqu’à atteindre un angle de trente degrés.” — Shackleton, SUD. L’Endurance coula le 21 novembre 1915. Frank Hurley, le photographe de l’Endurance, réussira tout de même à sauver la majorité de ses plaques photographiques de l’épave du bateau.

THE ENDURANCE AT A GLANCE

ERNEST SHACKLETON SET OUT to be the first one to cross Antarctica. In 1914, 27 men served as crew members of the British Imperial Trans-Antarctic Expedition. Shackleton’s plan was to lead one party aboard the Endurance to the Antarctic’s coast. From the opposite side of Antarctica, the ship Aurora was to supply the team for the second half of their journey. But the Endurance was eventually crushed by ice floes, leaving the men stranded on the pack ice. The crew drifted on the ice for over a year. Somehow they were able to launch their lifeboats and managed to land on Elephant Island. Shackleton then led a crew of five aboard the James Caird and against all odds reached South Georgia 700 nautical miles away. He then took two of those men on the first successful overland crossing of the island. Three months later, almost two years after Endurance set sail from England, he was finally able to rescue the remaining crew members they had left behind won Elephant Island.

L’Endurance — en un coup d’ceil

This should be the climax of our journey. If there is one thing we all wanted to accomplish during this voyage, it is the traverse of South Georgia, via the route that Shackleton, Crean and Worsley used while accomplishing the ultimate stage of their exploit.
La traversée de la Géorgie du Sud

Cela devait être le point d’orgue de notre périple. S’il y a une chose que nous voulions tous accomplir durant ce voyage, c’est la traversée de la Géorgie du Sud via la route que Shackleton, Crean et Worsley avaient empruntée lorsqu’ils avaient accompli la dernière étape de leur exploit.
SHACKLETON’S JOURNEY: The final stage of Shackleton’s heroic effort to return to civilization—and hopefully save the entire Endurance crew—was the historic 26-mile crossing of South Georgia Island. On May 10, 1916, after 17 days in blustery seas, and thanks to extraordinary navigation by Endurance Captain Frank Worsley, the James Caird miraculously arrived on the west coast of South Georgia (Lat: 54°S/Long: 38°W) with Shackleton and five of his men on board. On May 19, Shackleton, Worsley and Second Officer Tom Crean set off to cross the island’s unknown interior, heading toward the east coast’s whaling stations. The other three men remained behind to rest, two of them incapacitated. On May 20, having trekked without a break for 36 hours over glaciers and mountains, Shackleton, Worsley and Crean arrived at the Stromness whaling station.

OUR JOURNEY: Because of unexpected severe weather conditions, we did complete our crossing in three stages. First, we left King Haakon Bay to climb up the Shackleton Gap to Camp 1 (see map at right) where a severe storm forced us to escape down to Possession Bay after our first night in the mountain. We pushed on, and went up again to the camp, further crossing the Murray Snowfield, the Trident Pass and the Crean Glacier, all the way down to Fortuna Bay, after we spent one night camping just below the Breakwind Pass. The last section of our journey was from Fortuna Bay to the Stromness whaling station.


NOTRE VOYAGE: En raison de mauvaises conditions météorologiques imprévues, nous avons réalisé notre traversée en trois étapes. Tout d’abord, nous avons quitté la baie du roi Haakon pour gravir le col de Shackleton jusqu’au premier campement (voir la carte de droite) où une violente tempête nous a obligé à regagner la baie de la Possession après notre première nuit passée en montagne. Ensuite, nous sommes revenus au campement, avant de traverser le plateau Murray, le col du Trident et le glacier de Crean, direction la baie de Fortuna après une nuit passée à camper juste sous le col de Breakwind. La dernière partie de notre trajet a relié la baie de Fortuna à la station baleinière de Stromness.

EN HAUT À GAUCHE : Croquis de la Géorgie du Sud de Frank Worsley qui retrace la route qu’il a empruntée avec Shackleton et Thomas Crean depuis la baie du roi Haakon jusqu’à Stromness (indiquée par erreur Husvig). PAGE CI-CONTRE : Un rendu en 3-D de la traversée de Shackleton (en rouge) et de la nôtre (en bleu). ENCADRÉ DU HAUT : Zoom sur notre dernier campement et notre arrivée à Stromness. ENCADRÉ DU BAS : rendu en 2-D des deux traversées.

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Possession Bay
Landing

OCTOBER 22, 2014. *Australis* is safely anchored in Possession Bay, and Magnus, the ship’s first mate, shuttles the nine of us with all our gear to a beach at the north side of the bay. By 9 a.m. we have all landed safely. We immediately load our sleds and backpacks and are ready to go by 9:40. We leave our skis on our sleds as the first part of the climb consists of rock and packed snow. As previously predicted by Yan, our Chamonix-based meteorologist, the visibility is good but it is a bit windy.

Accostage

22 OCTOBRE 2014. Alors que l’*Australis* est bien ancré dans la baie de la Possession, Magnus, le second du bateau, nous dépose tous les neuf, ainsi que notre matériel, sur la plage du côté nord de la baie. À 9h00, nous avons tous accosté sans encombre. Nous chargeons immédiatement nos luges et sacs à dos et à 9h40 nous sommes prêts à partir. Nous laissons nos skis sur les luges, la première partie de l’ascension étant faite de rochers et de neige compacte. Comme Yann, notre météorologiste basé à Chamonix, l’avait prévu, la visibilité est bonne mais il y a un peu de vent.
Having landed first on the island, I am able to report on the local (sleepy) welcome committee comprised of several elephant seals, while Bertrand prepares his filming gear.

Premier à accoster sur l’île, je trouve un peu de temps pour rendre compte du comité d’accueil local (endormi) composé de plusieurs éléphants de mer, pendant que Bertrand prépare son matériel de tournage.
We move upward toward Shackleton’s Gap (a gentle slope of 300 m alt.), and we reach Shackleton Pass by noon. Up there it is very windy, probably 25-knots. The visibility is good and we have a very nice view of Possession Bay to our left, on the northern side of the island. We decide to push forward to our next camp that we should reach by 4-5 p.m. tonight.

But unexpectedly, the wind is getting stronger and hits us almost directly in the face, slowing us down tremendously. It becomes more and more difficult to progress. At 3pm we decide to continue forward for another hour, but are ready to head back to Haakon Bay if needed (it would be easier because it is mostly downhill, although it is not easy to go down when you are pulling a sled behind you!). — LH’s Journal Entries

Climbing to Camp 1
Ascension vers le premier campement

Nous nous dirigeons vers le col de Shackleton (par une pente douce qui monte à 300 mètres d’altitude) que nous atteignons à midi. Là-haut il y a beaucoup de vent, probablement 25 nœuds. La visibilité est bonne et sur notre gauche nous avons une très belle vue de la baie de la Possession dans la partie nord de l’île. Nous décidons de poursuivre vers le lieu qui doit accueillir notre prochain campement et que nous devrions atteindre vers 16h00 ce soir.

Mais de manière imprévue, le vent se met à souffler plus fort, nous arrivant quasiment de front et nous ralentissant énormément. Il devient de plus en plus difficile d’avancer. À 14h00, nous décidons de continuer à aller de l’avant pendant encore une heure mais tout en nous tenant prêt à rebrousser chemin pour regagner la baie du roi Haakon si besoin (ce serait plus facile parce qu’en descente, bien qu’il ne soit jamais facile de descendre en tirant une luge derrière soi !). — Journal de L.H.

Ben, our polar and mountain guide, leads the group of nine adventurers in single file through the burgeoning blizzard.

Emmené par Ben, notre guide de haute montagne, notre groupe de neuf aventuriers avance en file indienne au cœur du blizzard naissant.
After 30 minutes of progress, we can barely stand up. We realize that to continue would be potentially dangerous—It is very windy (gusting 50-knots). We decide to set up camp for the night, and need to build a snow wall around the tent. We decide to use only our ‘tipi’ tent because if something should happen, it is easier and safer, and we can huddle together for warmth like penguins.

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At times roped together to cope with potential crevasses, we progress down Possession glacier, pausing (below) as we climb down to our camp.

Parfois encordés les uns aux autres en cas de crevasses, nous progressons dans notre descente du glacier de la Possession, faisant une pause (ci-dessous) lors de la descente depuis notre campement.

**Down to Possession Bay**

**AS WE WAIT OUT THE MISERABLE STORM,** we feel reassured knowing that we are less than 2 km away from Possession Bay. In the worst-case scenario, we could go there and wait for our support boat *Australis* to come around from King Haakon Bay to the northern part of the island to rescue us. As we awake from a few futile hours of sleep, we peek outside the tent and realize that visibility has failed to improve. We are forced to abandon our climb and return to our boat. But rapidly, as is often the case on capricious South Georgia, the weather changes—this time for the better. Although interrupted by fierce winds that challenge all of us, especially eardrum-injured Keith, our descent is basked by the sun. As we return to *Australis* and get the bleak forecast for the coming days, we decide to cancel our mission, for now at least.

**Descente vers la baie de la Possession**

**DANS NOTRE DÉTRESSE,** sous cette tente, nous nous rassurons en nous disant que la baie de la Possession est à moins de deux kilomètres. Dans le pire des cas, nous pouvons espérer rejoindre la côte et attendre là-bas que notre bateau, l’*Australis*, actuellement dans la baie du roi Haakon au nord de l’île, vienne nous secourir. Après quelques heures d’un sommeil léger, nous jetons un œil à l’extérieur de la tente et nous constatons que la visibilité ne s’est pas améliorée. Nous devons abandonner notre ascension et retourner au bateau. Mais rapidement, comme c’est souvent le cas sur la capricieuse Géorgie du Sud, le temps se met à changer—cette fois pour le meilleur. Bien qu’interrompu par des vents violents qui nous posent problème, particulièrement à Keith qui a le tympan endommagé, notre descente se fait sous un beau soleil. À notre retour sur l’*Australis*, nous prenons connaissance des mauvaises prévisions météorologiques pour les prochains jours et décidons d’annuler notre mission, du moins pour le moment.
On our second attempt, we try a different route to go back to camp that is steeper but shorter than the glacier route we took down. We must progress rapidly, as the weather can quickly change.

Pour notre deuxième tentative, nous essayons une route différente, plus courte mais avec une pente plus raide que celle que nous avons prise pour descendre du glacier, afin de regagner notre campement. Nous devons avancer rapidement, le temps pouvant changer à tout moment.

**Up Again**

*a few days pass* as we sit out the storm elsewhere. On November 4th, strengthened by a relatively good weather forecast from Yan, we attempt to return to our camp and its cache of equipment. We eventually find it, and after more than three hours of incessant digging, we decide to go back to *Australis* to spend the night. We will continue the crossing tomorrow, and our equipment will be ready for us.

**L’ascension à nouveau**

*Quelques jours ont passé*, emportant la tempête vers d’autres horizons. Le 4 novembre, encouragés par les prévisions météorologiques relativement bonnes de Yann, nous tentons de retourner à notre campement où se trouve notre équipement. Nous le retrouvons enfin et après trois heures passées à creuser de façon ininterrompue, nous décidons de regagner *Australis* pour y passer la nuit. Nous continuerons la traversée demain ; notre équipement nous attendra.
WE HAVE LOADED ALL OUR EQUIPMENT into our backpacks and onto our sleds, and we feel invigorated and determined. We should have two full days of heavy skin-skiing and hiking up and down the mountains and passes of South Georgia to reach Fortuna Bay by the following evening, and we plan for one night of camping in the mountains. The first section of our travel consists of a wide expanse of snowfields (Murray Snowfield). We move toward the Trident Pass at the bottom of the Trident Peaks. Keith tries to ski this morning but quickly stops, as he has never skied before, so he switches to snowshoes (an old pair found on the boat).

**Crossing the Murray Snowfield**

NOUS AVONS CHARGÉ TOUT notre équipement dans nos sacs à dos et sur nos luges, nous sommes très motivés et déterminés. Nous devrions avoir devant nous deux jours entiers éprouvants de randonnée et de ski avec des peaux de phoques, passés à traverser les montagnes et les cols de la Géorgie du Sud pour atteindre la baie de Fortuna le soir suivant ; nous avons prévu de camper une nuit en montagne. La première partie de notre traversée consiste en une vaste étendue de glaciers (de Murray). Nous nous dirigeons vers le col du Trident au pied des sommets du Trident. Ce matin-là, Keith essaye de skier pour la première fois et troque rapidement ses skis pour des raquettes (une vieille paire trouvée sur le bateau).

**Traversée du plateau de Murray**
The Trident Pass

THE TRIDENT PASS at the foot of the three Trident mountains separates the Murray Snowfield and the Crean Glacier. It is very windy when we cross it; we can hardly stand up. Once we descend, I find that David is too far to the left. Ben finds a better route and realizes that we should stay to the right. I follow him, and on that slope we can sit on our backs and enjoy a nice ride down!

Le col du Trident

LE COL DU TRIDENT, au pied des trois pics du Trident, sépare le plateau de Murray du glacier de Crean. Il y a beaucoup de vent au moment où nous le traversons et nous avons du mal à tenir debout. Après être redescendu, David part un peu trop sur la gauche. Ben trouve un meilleur chemin et voit immédiatement que nous devrions prendre sur la droite. Je le suis car de ce côté-là on peut descendre en glissade sur le dos !

A strong southwest wind is pushing us in the right direction, but sometimes we fall because the wind is transversal. With help from our poles, we need to widen our stance to stand up against the fierce wind as we cross Trident Pass.

Un vent puissant venu du sud-ouest nous pousse dans la bonne direction mais nous fait parfois tomber en raison des bourrasques transversales. Alors que nous traversons le col du Trident, nous devons nous aider de nos bâtons et écarter les jambes pour éviter de tomber à cause du vent.
THE PLATEAU BETWEEN TRIDENT PASS AND BREAKWIND PASS is about 15 km long, and the monotonous path makes it feel very lengthy. Yet even when there is poor visibility, it is still gorgeous. At 3:30 p.m. we wonder if we should make camp for the night and finish the crossing tomorrow. Although some in the group want to finish all of the crossing tonight, Ben and Bertrand advise against it, and we camp before the pass. There are 6 km of unknown conditions on the other side and it is getting dark.

Camp 2 before Breakwind Pass

ABOVE AND INSET, TOP LEFT: Ben goes down this bowl to confirm that it is not too windy for the night.
LEFT: Our second and final camp before we finish crossing South Georgia, just as Shackleton had done before us.

Camp 2, avant le col de Breakwind

LE PLATEAU QUI SÉPARE LES COLS DU TRIDENT ET DE BREAKWIND S’ÉTEND sur quinze kilomètres – ce qui paraît très long quand vous les parcourez à ski. À 15h30, nous nous demandons si nous ne devrions pas monter le campement pour la nuit et finir la traversée le lendemain. Bien que certains veuillent essayer de finir la traversée ce soir, sur les conseils de Ben et de Bertrand, je décide que nous montons le campement avant le col. Il y a six kilomètres d’inconnu qui nous attendent de l’autre côté et il commence à faire sombre.

ABOVE AND INSET, TOP LEFT: Ben descend dans cette cuvette pour vérifier qu’il n’y a pas trop de vent pour passer la nuit.
DE HAUT EN BAS : Ben commence sa descente dans la cuvette ; Le second et dernier campement de notre traversée de la Géorgie du Sud, sur les traces de Shackleton.
AFTER A ROUGH NIGHT CAMPING IN OUR PROTECTIVE BOWL, we are up at 5 a.m. We leave camp at 6:45 a.m. and in less than an hour, we are up the Breakwind Pass (one of a series of small, very sharp and knotty passes). Once again, it is exceptionally windy up there, but otherwise the brilliant blue sky makes it much nicer than the day before.

The slope is very abrupt on the other side of the pass. We take turns to lower our pulkas with ropes and then we walk downhill.

Breakwind Pass

Le col de Breakwind

APRÈS UNE NUIT AGITÉE DE CAMPING DANS NOTRE CUVETTE PROTECTRICE, nous sommes réveillés à 5h00 du matin. Nous levons le campement à 6h45 et en moins d’une heure nous sommes au col de Breakwind (en fait, un parmi d’autres petits, étroits et abrupts cols). Une fois encore il y a beaucoup de vent, mais le temps est bien meilleur que la veille et nous avons droit à un ciel d’un bleu saturé.

La pente est très abrupte de l’autre côté du col. Nous alternons pour retenir nos pulkas avec nos bâtons tout en descendant.
Probably the most picturesque view that we encountered: going down the strikingly gorgeous and glistening Fortuna Glacier, with Fortuna Bay in the background. Magnificent!

OPPOSITE TOP: Several treacherous rocky sections await as we get closer to sea level. We often have to carry our pulkas in order not to ruin them on sharp rocks. OPPOSITE BOTTOM: After three hours of travel from camp 2, we arrive at the beach at 9:45 a.m. We take a few group photos, surrounded by curious and friendly king penguins.
Probablement la vue la plus pittoresque que nous ayons eue, en descendant du remarquablement beau et scintillant glacier de Fortuna, avec la baie de Fortuna en arrière-plan. Magnifique !

EN HAUT À DROITE : Quelques zones rocheuses, qui peuvent être traîtres, apparaissent à mesure que nous nous rapprochons du niveau de la mer. Nous devons souvent porter nos pulkas pour ne pas les fendre sur les rochers acérés.

EN BAS À DROITE : Après trois heures de voyage depuis notre deuxième campement, nous arrivons à la plage à 9h45. Nous prenons quelques photos de groupe, entourés de manchots royaux curieux mais amicaux.
CLOCKWISE FROM TOP LEFT: Magnus has arrived from Australis, anchored in the bay, to pick up most of our equipment, now superfluous. We need to cross a small stream coming from the König glacier in the bay. I demonstrate the ‘French’ way to do it, which requires plastic bags; the Brits do it their peculiar way, taking out boots and socks—it seems much more complicated. Keith and Ollie are on their way, unaware of the penguins that await them.

DE HAUT EN BAS ET DE GAUCHE À DROITE : Magnus est arrivé de l’Australis, ancré dans la baie, pour récupérer la majeure partie de notre équipement, maintenant superflu. Nous devons traverser un petit ruisseau venant du glacier de König dans la baie. Je le fais à la française, ce qui implique d’avoir des sacs plastiques ; les britanniques ont une technique particulière : ils enlèvent leurs chaussures et leurs chaussettes—ce qui est beaucoup plus compliqué ; Keith et Ollie en chemin, oubliant la présence possible de manchots.
Fortuna Bay to Stromness

Elephant seals and fur seals relax along the beach. We always stay at a distance, as the adults can be annoyed, especially when youngsters are around.

De la baie de Fortuna à Stromness

Des éléphants de mer et des otaries à fourrure se prélassent sur la plage. Nous gardons toujours nos distances car les adultes peuvent s’énerver, surtout quand les plus jeunes sont dans les parages.
THE LAST SECTION of the crossing is a gentle-sloped saddle leading to the old whaling station of Stromness. Compared to what we have endured, it is an easy walk up the hill and down to Stromness. Yet for an exhausted group like Shackleton’s, there was always the threat of bad weather, snowstorm, or gale-force wind. Meanwhile, for our journey, a few patches of snow punctuate the climb up and down the pass. It is hard to imagine what Shackleton and his two teammates must have felt when they saw Stromness, and realized they were saved against such highly improbable odds.
With Stromness in the background, I stand tall, 'on the shoulders of Shackleton', inspired by a story of endurance and perseverance. When he reached the station on May 20th, Shackleton's first question to the manager was about the war that England had entered as the Endurance departed. We remembered the exchange: "Tell me, when was the war over?" Shackleton asked. 'The war is not over,' he answered. 'Millions are being killed. Europe is mad. The world is mad.'

Avec Stromness en arrière-plan, je me sens inspiré par Shackleton, par une histoire d’endurance et de persévérance. Quand il atteignit la station baleinière, le 20 mai, la première question de Shackleton au responsable concerna la guerre dans laquelle l’Angleterre s’était engagée au départ de l’Endurance. C’est ainsi qu’il se rappelait cet échange : « Dites-moi, quand la guerre a-t-elle fini ? Demanda-t-il. - La guerre n’est pas finie, répondit-il. Des millions de personnes se font tuer. L’Europe est folle. Le monde est fou. »
After an eventful crossing, we finally reach the whaling station of Stromness. We can’t imagine the joy Shackleton, Worsley and Crean must have felt when, at seven o’clock to the minute, they heard the sound of a steam whistle calling the men at the station to work. They knew they were saved. It was the first man-made sound they had heard in 18 months. As for us, we are simply very ecstatic, and celebrate in a manner Shackleton could scarcely have envisioned—with team photographs.

“To have gone all that way and not made the crossing would have been soul-crushing.”
—Ollie

“À avoir parcouru tout ce chemin et ne pas avoir fait la traversée aurait été déchirant.”
—Ollie
ABOUT The old station of Stromness, where Shackleton, Worsley and Crean arrived on May 20, 1916. They arrived at the Stromness administration center, which was also the home of the Norwegian whaling station’s manager. Like all other whaling stations, Stromness has been damaged over time and many of its buildings reduced to ruins or still not purged of asbestos. Instead of tediously toasting to victory, we relax on the beach and reflect as we wait for Australia’s tender to pick us up. We succeeded, somehow, but how insignificant is our exploit compared to that of Shackleton and his team.

EXCESS: La vieille station balnéaire de Stromness que Shackleton, Worsley et Crean atteignirent le 20 mai 1916. Ils arrivèrent au centre administratif de Stromness, qui n’était autre que la maison du responsable norvégien de la station. Comme toutes les autres stations balnéaires, Stromness s’est abîmée au cours du temps et beaucoup de ses bâtiments sont tombés en ruines ou n’ont pas encore été décapités. Au lieu de porter un toast minaudant à notre victoire, nous nous reposons sur la plage et méditons en attendant que l’Australis vienne nous récupérer. En quelque sorte nous avons réussi, mais notre exploit semble bien insignifiant comparé à celui de Shackleton et son équipe.
Stromness at the time of Shackleton. From 1912 until 1931 it was operated as a whaling station. In 1931 it was converted into a ship repair yard, and remained in operation until 1961 when the site was abandoned.

Stromness à l’époque de Shackleton. De 1912 à 1931, c’était une station baleinière. En 1931, elle a été convertie en chantier de réparation navale, jusqu’en 1961, date à laquelle il a été abandonné.
Climate Change

The König glacier retreat as a symbol of climate change on South Georgia Island

Changement Climatique

Le recul du glacier König, symbole du changement climatique sur l’île de Géorgie du Sud

Fortuna Bay is home to king penguins, fur seals and elephant seals, especially at the beginning of the Antarctic spring. In Shackleton’s days, the bay was entirely covered by the König glacier. Now, it is home to tussock grasses.

La baie Fortuna abrite des manchots royaux, des otaries à fourrure et des éléphants de mer, notamment lorsque le printemps arrive en Antarctique. Au temps de Shackleton, la baie était entièrement recouverte par le glacier König. Il a depuis laissé place à des touffes d’herbe.
WHILE TRAVELING, it is virtually impossible to comment on the state of climate change and disorder. All you can remark on is the weather of the day. But given the chance to put our observations in historical perspective, conclusions become easier, if not obvious.

Our journey took us to incredible locales, and some of the vistas we enjoyed were absolutely astonishing. One iconic place was Fortuna Bay, where the most significant part of our journey across the island of South Georgia ended. Today it is a beautiful beach, populated by nesting penguins and relaxing seals, and in the distance is the front of the König glacier.

South Georgia is accessible and significant enough that glacier changes and climate trends have been studied there. In a 2008 study (Gordon et al.), frontal positions for a sample of 36 out of a potential 160 glaciers were mapped and analyzed for 20th-century fluctuations, using a variety of documentary and geomorphological records, including historical photographs reaching as far back as 1882 but with most of the data much more recent. Of these glaciers, two were currently advancing, 28 were retreating, and six were stable or showed a complex response. The impact has been more noticeable on the northeast coast of the island where König Glacier is located.

The dotted lines on the map at left show König Glacier's front positions in various years. In Shackleton’s time, the glacier was fully formed and bordering the beach where we stopped to drop off our equipment on our boat Australis. In the last few years, the glacier has receded much faster than earlier in the 20th century. The front is now more than 2 km from the shore.

Climate change campaigner James Balog has extended his glacier change survey, the ‘Extreme Ice Survey’ (EIS), into the far south and has placed cameras on South Georgia.

Where will the front of the glacier be on the 150th anniversary of the Shackleton crossing in 2066?

IL EST PRATIQUEMENT IMPOSSIBLE de commenter l’état du changement et du désordre climatique uniquement à partir de voyages. La seule chose que vous pouvez faire, c’est constater le temps qu’il fait. Mais quand vous avez la chance de pouvoir replacer vos observations dans une perspective historique, les conclusions deviennent plus faciles à tirer, voire même évidentes.

Au cours de notre voyage nous avons visité des lieux incroyables et admiré des vues époustouflantes. La baie Fortuna, où nous avons achevé la partie la plus importante de notre périple à travers la Géorgie du Sud, est un lieu emblématique. De nos jours, c’est une belle plage qui pullule de pingouins et de phoques se prélassant, avec le glacier König se dessinant au loin.

La Géorgie du Sud est une île suffisamment importante et accessible pour que les changements observés au niveau des glaciers et les transitions dans les tendances climatiques y aient été étudiés. Dans une étude datant de 2008 (Gordon et al.), les fluctuations, au cours du XXe siècle, des positions des fronts glaciaires d’un échantillon de 36 glaciers (sur un total potentiel de 160) ont été répertoriées et analysées à partir de relevés géomorphologiques et de dossiers documentaires, notamment des photographies. Parmi ces glaciers, deux progressaient, vingt-huit reculaient et six étaient stables ou présentaient des réponses complexes. Le changement était le plus visible sur la côte nord-est de l’île, où se trouve le glacier König.

Les lignes en pointillés, sur la carte de gauche, indiquent la position du front glaciaire du glacier König à différentes dates. À l’époque de Shackleton, le glacier était complètement formé et bordait la plage où nous nous sommes arrêtés pour déposer notre matériel sur l’Australis. Ces dernières années, le glacier a reculé beaucoup plus rapidement que par le passé. Le front glaciaire est maintenant situé à plus de 2 km du rivage.

Le militant pour le climat, James Balog, a intégré les régions les plus au Sud à son enquête sur les changements des glaciers, « Extreme Ice Survey » (EIS), et placé des caméras sur l’île de la Géorgie de Sud.

Où sera situé le front glaciaire à l’occasion du 150ème anniversaire de la traversée de Shackleton, en 2066?