# The Beginning: 1 Taking part in the Trans-Antarctic Expedition


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*The account of the Trans-Antarctic Expedition (TAE) 1955 to 1958 has already been told in several publications. The scientific results have been published in a series of 16 scientific reports. South Africa's participation in the expedition consisted partly of the secondment of Hannes la Grange from the SA Weather Bureau.*

*The vessel* Theron *left from London on 14 November 1955. On board were the expedition leader, Dr Vivian Fuchs, several members of the main party who would spend the expedition's second year in Antarctica and would undertake the crossing journey in the summer of 1957/58, a few others including members of Sir Edmund Hillary's New Zealand party and the advance party who would spend the first year establishing the expedition base, Shackleton, in the vicinity of Vahsel Bay in the south-east corner of the Weddell Sea. The expedition reached the pack-ice on 22 December 1955 and after encountering severely difficult ice conditions reached the Vahsel Bay area on 29 January 1956.*

*The advance party of eight men suffered a severe setback during the "March blizzard" when the partly erected base hut and stores were filled with or covered by drift snow. The sea ice, on which a large amount of their provisions were, had broken off and was lost — the men had to work outside and sleep in tents during the winter.*

*The main party on board mv* Magga Dan *arrived in January 1957. The erection of the base was completed and a small station called South Ice was established on the polar plateau about 450 km to the south. Three men spent the winter there. Several journeys were undertaken. During the winter the scientific programmes were continued and preparations for the crossing journey were made. The crossing party left Shackleton on 24 November 1957 and after crossing badly crevassed areas, arrived at South Ice on 21 December. They departed from there on 25 December. Having crossed areas with bad sastrugi they arrived at the South Pole Station on 19 January 1958, the author being the first South African to do so. After their departure on 24 January progress was better and after picking up supplies at various depots laid by Sir Edmund Hillary's New Zealand party, they arrived at Scott Base in the Ross Sea on 2 March, after a crossing journey of 99 days. The expedition continued its scientific programme during the journey. In taking part in the TAE the foundation was laid for the future South African expeditions to Antarctica.*

*Die verhaal van die Trans-Antarktiese Ekspedisie (TAE) 1955 tot 1958 is reeds in verskeie publikasies vertel. Die wetenskaplike resultate is in 'n reeks van 16 wetenskaplike verslae gepubliseer. Suid-Afrika se deelname aan die ekspedisie het gedeeltelik bestaan uit die sekondering van Hannes la Grange van die SA Weerburo.*

*Die boot* Theron *het op 14 November 1955 uit Londen vertrek. Aan boord was die ekspedisieleier, dr Vivian Fuchs, verskeie lede van die hoofgroep wat die ekspedisie se tweede jaar in Antarktika sou deurbring en die oortog in die somer van 1957/58 sou onderneem, 'n paar ander onder wie lede van Sir Edmund Hillary se Nieu-Seelandgroep en die loodsgroep (advance party) wat in die eerste jaar die ekspedisiebasis, Shackleton, in die omgewing van Vahselbaai in die suidoostelike hoek van die Weddellsee sou oprig. Die ekspedisie het die pakys op 22 Desember 1955 teëgekom. Nadat uiters swaar ystoestande ondervind is, is die Vahselbaaigebied op 29 Januarie 1956 bereik.*

*Die loodsgroep van agt man het 'n swaar terugslag tydens die "Maart-sneeustorm" beleef toe die gedeeltelik voltooide basishut en voorrade deur jagsneeu toegewaai is en die see-ys, waarop nog baie van hulle voorrade was, afgebreek en weggedryf het. Die mans moes deur die winter buite werk en in tente slaap.*

*Die hoofgroep van die ekspedisie het in Januarie 1957 aan boord van die* Magga Dan *aangekom. Die oprigting van die basis is voltooi en 'n klein stasie, Southice, ongeveer 450 km na die suide op die ysplato, is opgerig. Drie mans het die winter daar gebly. Verskeie reise is onderneem. Gedurende die winter is die wetenskaplike programme voortgesit en voorbereidings vir die oortog is getref. Die oortoggroep het op 24 November 1957 van Schackleton af vertrek en nadat gebiede met groot ysskeure oorgesteek is, op 21 Desember op Southice aangekom. Hulle het op 25 Desember daarvandaan vertrek. Nadat gebiede met hoë sastrugi oorgesteek is, is die Suidpoolstasie op 19 Januarie 1958 bereik. Die skrywer was die eerste Suid-Afrikaner wat dit gedoen het. Na hulle vertrek op 24 Januarie het hulle beter gevorder. Nadat hulle voorrade opgelaai het wat deur Sir Edmund Hillary se Nieu-Seelandgroep in verskeie depots gelaat was, het hulle die Scottbasis in die Ross-see op 2 Maart bereik na 'n reis van 99 dae. Gedurende die oortog het die ekspedisie met sy wetenskaplike program voortgegaan. Met die deelname in die TAE is die grondslag gelê vir die toekomstige Suid-Afrikaanse ekspedisies na Antarktika.*


## INTRODUCTION

The story of the Trans-Antarctic Expedition (TAE) has been told in publications by Sir Vivian Fuchs, Sir Edmund Hillary and George Lowe, as well as in numerous articles, some by myself. The scientific results were published in a series Trans-Antarctic Expedition 1955-58, *Scientific Reports*, numbers 1 to 16 as well as in many articles in scientific journals. The following are a few incidents, possibly presented a little more on a personal note of my own participation. Later, during the first South African National Antarctic Expedition, 1959 to 1960, the participants depended heavily on the experience obtained during the TAE.

## THE FIRST YEAR, 1955-56

### The beginning

Having travelled from Cape Town in the mv *Cape Town Castle*, I arrived in London and joined the TAE on 4 November 1955.

It was an independently organised expedition funded by donations from four Commonwealth governments and the private sector. Its aim was to partake in the programmes of the coming International Geophysical Year of 1957/58. It would also undertake the first land-crossing of Antarctica.

Our advance party was to erect a base, Shackleton, on the Filchner Ice Shelf, in the vicinity of Vahsel Bay in the south-east corner of the Weddell Sea. The following summer the crossing party would do the actual crossing *via* the South Pole to McMurdo Sound in the Ross Sea where the New Zealand part of the expedition was to erect Scott Base. The New Zealand party would also lay provision depots inland where provisions would be picked up by the crossing party after they had passed the South Pole.

South Africa's contribution to the TAE consisted of a donation which should cover the expense of the radiosonde instruments to be used and the secondment of myself as meteorologist, initially for the first year.

## THERON'S VOYAGE

The expedition left London on 14 November on board the 820-ton Canadian Sealer mv *Theron*. After calls at St Vicente, Montevideo and South Georgia we reached the pack-ice on 22 December at 62°43'S, 30°59'W. Encountering severely difficult ice conditions, which for many days beset the vessel and in general slowed down progress, the Vahsel Bay area was reached on 29 January.

The advance party of eight comprised K V (Ken) Blaiklock (leader, surveyor), R A (Ralph) Lenton (deputy leader, carpenter and radio-operator), Dr R (Rhino) Goldsmith (medical officer), Sergeant E (Taffy) Williams (RAF radio-operator), Sgt-Maj D E L (Roy) Homard (REME, engineer), R H A (Tony) Stewart (chief meteorologist), P H (Peter) Jeffries (meteorologist) and J J (Hannes) la Grange (South Africa, meteorologist).

Also on board were the expedition leader, Dr V E (Vivian "Bunny") Fuchs and six members of the main party, who were to spend the second year at Shackleton; Sir Edmund Hillary and two members of the New Zealand party; a cine-photographer and 24 huskies. *Theron* had a Norwegian-speaking crew of 19 including the captain, Harold Marø.

## ESTABLISHING SHACKLETON

The days following the landing were spent in off-loading onto the bay ice and hauling loads to Depot I at the bottom of a steep rise. From here everything would be hauled 1,6 km inland to where Shackleton was to be erected on the Filchner Ice Shelf at 77°59'S, 37°09'W, altitude 57,9 m. On 7 February everything had been off-loaded. Heavy pack-ice moved in from the north and as it was feared that *Theron* might be caught up and beset for the winter, it was decided that she would depart immediately. The advance party was on its own.

## THE YEAR OF THE ADVANCE PARTY

We pitched our two-man pyramid tents in which we would sleep. The Sno-Cat tractor's crate measuring 6,4 x 2,7 x 2,4 m would serve as our temporary living room, kitchen and radio room. Cooking was done at one end on three primus stoves and down the centre was a table with sitting benches on either side. In a corner was a small drum on a heater in which snow was melted.

We spent our time hauling up the 270 tons of stores from Depot I and starting to build the hut. On 1 March Tony Stewart, Peter Jeffries and I started our three-hourly surface meteorological observations.

Temperatures were dropping and drifting snow and white-out made work difficult. By mid-March we had hauled up many loads, including virtually all of the hut's components. The framework was up, the floor had been laid and the roof and wall panels lay sorted out, ready to be fitted in.

Then disaster struck in the form of what became known as the "March blizzard". On 21 March at a temperature of −33,3 °C a strong southerly blizzard started. It abated on the 27th and in −39 °C we went out to start working again. The trusses of the framework had acted as a wind-break and almost the whole structure was filled with drift snow. A drift of 4,5 m high had formed on the leeward side covering the panels which lay sorted out on the north side. The next day Ken Blaiklock and Tony Stewart discovered the worst. During the blizzard the sea ice had broken off and drifted away and with a few exceptions almost everything still at Depot I was lost: about 259 x 182 ℓ drums fuel, all the anthracite (23 t) for the Aga stove, building material for the vehicle workshop, balloon hut and rhombic aerial, 35 seal carcases, aircraft fuel, coolants, oil and grease, a tractor, chemicals and instruments for the radiosonde programme, etc, etc. Assessing our situation we found that we would have enough food for the rest of the year but we would have to restrict ourselves to 13,7 ℓ paraffin, including 0,9 ℓ for each tent, per day.

In the meantime we had been unable to make radio contact with the outside world. On 7 May, 12 weeks after *Theron* had departed, Ralph Lenton, using a Morse-key and the small radio transmitter that was inside the crate, managed to make contact with a FIDS base in Grahamland. Radio conditions, as so often happened, were bad and only two days later Ralph could, *via* Port Stanley, get Ken Blaiklock's telegram away to the Expedition Headquarters in London, informing them of what had happened. Over the next few days he also received several telegrams for us from our relatives.

The winter was cold with outside temperatures dropping to −41,7 °C in March, −44,6 °C in April, −50,4 °C in May, −46,2 °C in June, −50,6 °C in July, −53,0 °C in August, −43,2 °C in September and −39,4 °C in October.

Whenever it was possible we carried on outside, using paraffin lamps in the dark. Work consisted mainly of digging snow out of the hut and digging panels out of the snow and fitting them into the structure's frame. But drift snow made our work difficult. The more panels we put in the more drift formed inside and this had to be dug out again.

Steadily we made progress. Midwinter's Day was celebrated on 21 June and on 7 August, six months after *Theron's* departure, the first two men moved into one of the completed cubicles in the hut which was still unheated. We had been the first expedition to spend a winter in tents at such high latitudes.

By the beginning of September the self-recording meteorological instruments had been installed and a full 24-hour programme was instituted. By the end of October the generators and radio were working and the first voice contact was established with the BBC in London. Ken Blaiklock, Roy Homard and I collected a load of 1,5 t of seals in Vahsel Bay and in November Ken,

Rhino Goldsmith and Peter Jeffries made two trips by dog team and established a small depot 80 km to the south. Later Ken and Rhino made a 20-day journey of 580 km to the Theron Mountains to the south-east. These had been discovered from the Auster aircraft the previous summer.

In December it became warm and the snow surface became soft — the temperature rose to +2,8 °C.

# THE SECOND YEAR, 1957-58

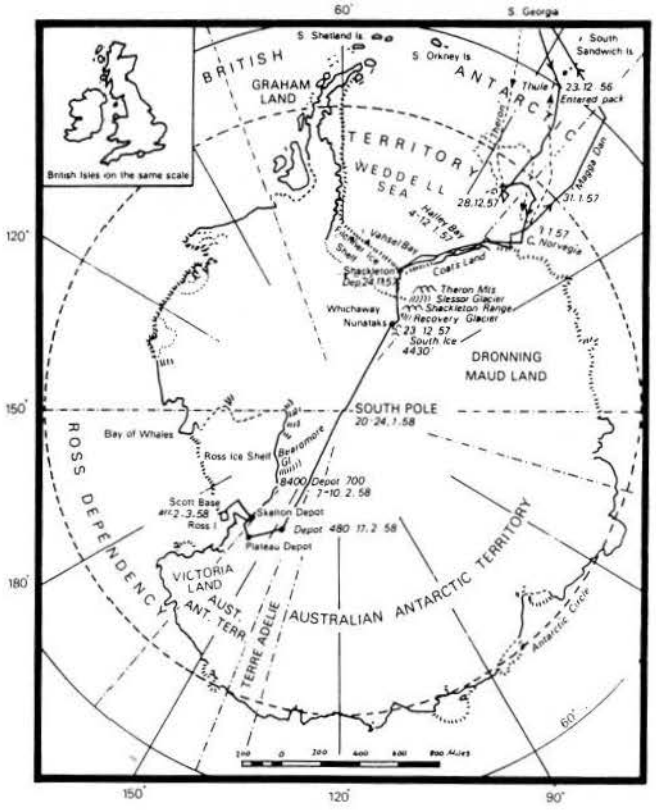
## Arrival of the main party

On 12 January Bunny Fuchs, George Lowe and Donald Milner (BBC correspondent) arrived from Halley Bay (north of us) in the Otter aircraft piloted by John Lewis. The next day the 1 850-ton Danish polar vessel, *Magga Dan*, arrived. On board were the other members of the main party and the 10 members of the Royal Society's expedition at Halley Bay who were returning to England and who helped in off-loading and finishing the work on our hut that still had to be done — some parts had been lost in the March blizzard. Four separate small buildings were erected and the stores were hauled up to Shackleton, about 75 tons a day. My colleague and friend in the SA Weather Bureau, P S (Piet) du Toit was also on board.

Several reconnaissance flights were undertaken to the south, as that would be our route on the crossing journey. Bunny Fuchs selected a site for the small station, called South Ice, about 10 km south of the most southerly rock outcrops that were called Whichaway Nunataks; its position was later calculated as 81°57'S, 28°52'W and its altitude as 1 350 m.

Rhino Goldsmith, Tony Stewart and Peter Jeffries departed on *Magga Dan* on 28 January. The main party, for the second year, were: Dr V E (Vivian "Bunny") Fuchs (expedition leader, geologist), D G (David) Stratton, (deputy leader, surveyor), K V (Ken) Blaiklock (surveyor), D L (David) Pratt (engineer), Sgt-Maj D E L (Roy) Homard (REME engineer), R A (Ralph) Lenton (carpenter, radio-operator), J G D (Geoffrey) Pratt (geophysicist), Dr A F (Allan) Rogers (medical officer, physiologist), Dr H (Hal) Lister (glaciologist), Dr P J (Jon) Stephenson (geologist — Australia), W G (George) Lowe (photographer — New Zealand) and myself, now the only meteorologist.

Several reconnaissance flights were undertaken and men with dog teams were flown to the Theron and Schackleton mountain ranges to do survey and geological work. On the official maps today one of these spreading to the south-east from about 80°18'S, 28°50'W bears the name Mount Lagrange.




*The voyages of* Theron *and* Magga Dan

## Establishing South Ice

On 4 February John Lewis in the Otter, flew George Lowe, Hal Lister, Ken Blaiklock and Jon Stephenson up to establish the South Ice station. The latter three were to spend the winter there doing meteorological and glaciological work. Several more flights took up provisions, parts of the hut and equipment.

## The second winter

To the remaining members of the advance party the second winter was somewhat different. It was also cold with regular blizzards but all of us at Shackleton could enjoy the comforts and heat of a proper hut. Our lowest outside temperatures were: March −40,2 °C, April −37,2 °C; May −51,2 °C; June −46,4 °C; July −53,2 °C; August −55,1 °C and September −51,7 °C. At South Ice it was colder; the lowest temperatures were: February −40,1 °C; March −47,2 °C; April −44,2 °C; May −53,1 °C; June −44,4 °C; July −57,3 °C; August −53,3 °C and September −55,2 °C.

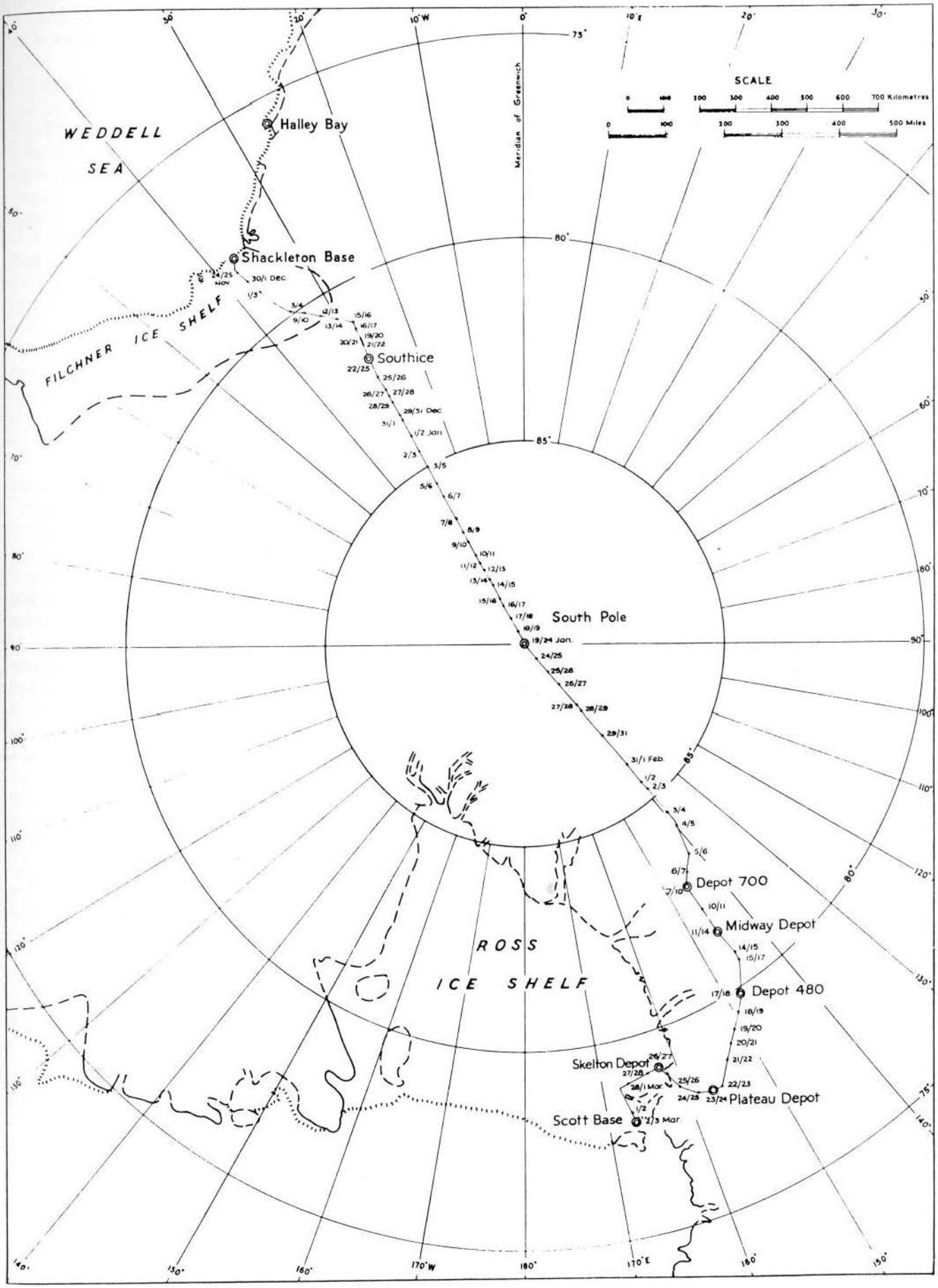
At Shackleton we were all in some or other way involved in making preparations for the coming crossing journey during the summer. Allan Rogers and Geoffrey Pratt continued their scientific programmes. Several of the men took turns in doing the meteorological observations during the night. To the meteorological programme I added certain glaciological observations for Hal Lister. As during the first winter, the dogs were kept in tunnels under the drift heap. I assisted David Stratton in caring for them.

The worst winter weather occurred in August and this prevented the necessary preparations for the expedition's fieldwork to start on 1 September as Bunny had planned. During September the Otter which had been "dug-in" for the winter, had to be dug out in great haste (the men worked around the clock in −45 °C and strong wind) to go to the rescue of Gordon Haslop and Allan Rogers. Their emergency flight to Halley Bay to assist the medical doctor who had been injured in a fall had overflown the base. They were stranded to the north of it and needed fuel.

## Field journeys

Various spring journeys were undertaken.

On 8 October Bunny Fuchs and a party left Shackleton with the first loads to South Ice. They encountered high sastrugi and very badly crevassed areas. Some days they progressed as little as 700 m. After 37 days they had covered the 640 km to South Ice and arrived there on 13 November.




*Position of camp-sites during the journey across Antarctica*

# THE CROSSING JOURNEY

## From Shackleton to the South Pole

The party flew back to Shackleton, finalised everything for the final expedition and set out on 24 November. They had to cross the same difficult terrain and arrived at South Ice on 21 December.

The four members of the air crew were still at Shackleton when the crossing party set out from South Ice late on Christmas Day with four Sno-Cats, three Weasels and one Muskeg tractor. The two dog teams had left two days earlier to reconnoitre the route ahead.

During the rest of the journey we did regular glaciological and three-hourly meteorological observations, gravity readings and a seismic station every night — this on average every 48 km to the Pole and every 80 km after that. My task was to charge and fire the dynamite shot down a hole and to assist in laying out and picking up the geophones before and after the sounding.

Throughout the journey, except at the Pole Station, we slept in two-man tents. I shared a tent with Geoffrey Pratt with whom I also shared the seismic Sno-Cat (Charlie) that was affectionately called Haywire. Being co-driver of a vehicle also meant that I was co-responsible for its maintenance — refuelling at every stop and doing the general maintenance every few days. Greasing the 296 ice-covered grease points on the tracks of a Sno-Cat was not easy in drifting snow. Later, when George Lowe's Weasel had been abandoned (the smaller vehicles were abandoned at regular distances when they were no longer needed to haul loads) he joined us and we formed a three-man team in Haywire.

From the very first day we had many factors against us — bad weather, problems with the vehicles and terribly corrugated stretches of continuous sastrugi up to a metre high that put a heavy strain on the vehicles and tow-bars to the sledges. This bad surface was unexpected as Hillary's party on the other side of the Pole had found easier conditions. These unfavourable conditions lasted up to about 90 km from the Pole.

In the meantime the air crew had taken off from South Ice for McMurdo Sound *via* the South Pole and completed the first ever nonstop trans-Antarctic flight in a small single-engined aircraft covering the distance of 2 300 km in 11 hours.

On 19 January we saw the American South Pole Station ahead of us. We received a hearty welcome some distance out and moved in with a variety of flags and pennants on the vehicles. On "Haywire" we put the South African flag and on one sledge a green pennant on which I had embroidered a springbok on one side and a protea on the other. We crossed the "date-line" — the Pole Station kept New Zealand time where it was the 20th.

I was thankful to have reached the South Pole, the first South African who had been able to do so. A short distance from the station was a circle of fuel drums surrounding the United States and United Nations flags. This was meant to be the geographic south pole and there one could walk "around the earth" in about three minutes. Every direction from the Pole was of course, north.

## From the South Pole to Scott Base

On 24 January, exactly two months after the departure from Shackleton, and one month from South Ice, we left for Scott Base. We had covered 1 450 km. Another 2 000 lay ahead.

After the Pole the going was easier. We picked up supplies that Ed Hillary and his party had laid for our use. The first of these was Depot 700 at 82°58'S, 146°02'E, altitude 2 551 m. Here Ed joined us and travelled with us for the remainder of the journey.

On 23 February we did our last seismic station at Plateau Depot (78°02'S, 158°26'E) at an altitude of about 2 522 m. The following day we started the long descent of the Skelton Glacier. Going down was difficult and we encountered the worst blizzard of the whole crossing journey. At the foot of the glacier was the Skelton Depot (79°02'S, 162°16'E) on the Ross Ice Shelf about 290 km from Scott Base. From there it was good going on the level shelf ice.

As at the Pole Station, flags and pennants were flying as we rode into a tremendous welcome by the New Zealanders and Americans at Scott Base (77°51'S, 166°48'E) on 2 March. Bunny Fuchs had planned our crossing journey from Shackleton to Scott Base to take 100 days. We completed the 3 473 km in 99 days.

# AFTERMATH

After our return to London, Bunny Fuchs was knighted. Every expedition member received the Polar Medal from Her Majesty, the Queen in Buckingham Palace. Bunny received the Royal Society's Gold Medal, we others each received a bronze replica. We also each received a medal from the New York Explorers Club. I received the first gold medal that the *Suid-Afrikaanse Akademie vir Wetenskap en Kuns* awarded for scientific achievement. Several years later, partly due to my participation in the TAE, I was awarded the first gold Antarctic Medal of the South African Antarctic Association. One of the mountains in the Shackleton Range was named after me.

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