

(vi) Hannes is reeds in 1958 vereer deur die toekenning van 'n erepenning vir wetenskaplike werk in Antarktika deur die Suid-Afrikaanse Akademie vir Wetenskap en Kuns. Vir sy deelname aan die Trans-Antarktiese Ekspedisie het hy ook 'n brons kopie van 'n goue medalje van die Royal Geographical

Society, die British Polar Medal en 'n medalje van die New York Explorers' Club ontvang. Die Suid-Afrikaanse Antarktiese Medalje word nou aan hom toegeken vir al sy bedrywighede in verband met Antarktika en die sub-Antarktiese eilande sedert 1950.

## WITH THE R.S.A. TO THE ANTARCTIC

By W. A. NIEMAN

Table Mountain stood etched against a pale blue summer sky as the m.v./R.S.A.'s foghorn sonorously responded to the farewell hoots of tugs and other vessels in Table Bay on Friday, 27th December, 1963 at 3 p.m. On board were the team for SANAE V, the American seismograph team, the Public Works team, the neutron monitor team from Potchefstroom University (Kobus van der Walt and Cecil Smith), and the five 'observers'—Dave Perkins, representing the United States of America, Koos van Zyl and Johan Loock of the University College of Western Cape, Jan Nel and myself, representing the South African Antarctic Association.

The sky was cloudless, the sea calm and there was only a light breeze but an afternoon haze aided in obscuring a good final look at land as the air temperature remained a sultry 20°C. We were off to the Antarctic! "This is the life, boys!"

During the first night the air temperature never fell below 20°C while the sea temperature rose to 21°C. Next morning, it was still fine and clear, but not for long. A south-southwesterly wind, reaching 10 knots, heralded the approach of cirrus clouds in the southwest and by noon the sea had become so rough that I was no longer able to measure sea temperatures from the freight deck. The master of the RSA, Captain K. T. McNish, kindly permitted me to use the bridge deck for air and sea temperature observations. His officers also volunteered to help me maintain an hourly watch on these temperatures in order to get a complete record—one has to sleep sometimes!

Light rain occurred at 15,00 GMT (it was not overcast) but at 17,00 GMT the sky was clear above us. Five minutes later, however, low stratus clouds again covered the whole sky, a westerly wind (40 knots) traced white streaks across a heavy sea and the air temperature dropped from 19.1°C to 16.0°C. By midnight the westerly wind reached 50 knots as the ship reached a position of 38° 24' S, 15° 06' E. The storm lasted for more than six days until 4th January, 1964 when we passed that magnificent but grim, snow-capped volcanic island, Bouvet Oya (54° 26' S, 3° 24' E).

Westerly, south-westerly and, at times, north-westerly winds raged throughout the Roaring Forties, reaching average speeds of 35 knots. The barometer, at one stage (30th December), dropped 8.8 millibars in eight hours. Sea-sickness took its toll and Pieter de Waal (radio technician, SANAE V) and Johan Loock almost never left their bunks during these days. Least affected by the pitching and rolling of the ship were Tollie Traut and Zac Ezekowitz, doctor and geophysicist of SANAE V, respectively.

Actually they were the clowns-cum-practical-jokers and even the captain was not immune to their antics. It was the two of them who created "HERRIKIN" (from "hurricane"), "that man at the wheel" who was responsible not only for the figure eight movement of the ship but for everything extraordinary happening. I am sure SANAE V will never regret having Tollie and Zac with them.

Trevor Robertson (geomagneticist) and Koos Pretorius (senior diesel mechanic) competed for the title "Public Sleeper No. 1" while the storm lasted. I think Koos eventually won, for he stayed on in a horizontal position in the smoke room when Trevor made his singing rounds of the bathroom and decks. But, when we entered the ice, no one, not even Johan Loock or Jan "Voorrade" du Plooy (Department of Transport), could match Trevor's appetite for bread. His farewell gift from the ship's cook before we departed from Polarsirkelbukta, was . . . a loaf of bread!

New Year was celebrated four times: South African time, ship's time, Greenwich Mean Time and also U.S.A. time in honour of the three Americans on board. On New Year's Day we also started the ice watch and two of the passengers were on the bridge for a two hour watch constantly until we entered the ice. This duty helped us forget the monotony of the rolling ship and the chaps suffering sea-sickness were "cured" while on watch.

When we reached Bouvet, we were already in sub-Antarctic waters (sea temperature 0.3°C) and air temperatures began falling below freezing. On 5th January, the first small iceberg was sighted (56° 30' S) five hours before we crossed the Greenwich Meridian. Light flurries of snow became more frequent, as well as growlers

and bergy-bits and at 03.30 GMT on 6th January, we encountered the first very open rotten pack ice or field ice (57° 48' S, 0° 26' W). The sea temperature was -0.9°C at that stage. Gradually the pack ice became more dense and at 14.10 GMT just before we entered a very thick patch of hummocked pack ice, we sighted 11 killer whales near a lonely seal on an ice-floe—looking not unlike a sardine on toast! Soon afterwards we were in open water. It took us 11 hours to pass through the pack ice and everything was made ready for our arrival at the South African base, a mere 10° of latitude away!

Our high spirits were unfortunately soon damped because we again encountered pack ice on 7th January at 19.30 GMT (63° 31' S, 2° 53' W)—had we the previous day but looked at Figure 31 of the *Oceanographic Atlas of the Polar Seas* (Part 1, Antarctic, 1958; U.S. Navy Hydrographic Office, Washington)!

Bands of open pack ice gave way to open pack consisting of heavy floes on which seals were often to be seen and from then onwards, for the next 18 days, the stout RSA had a constant battle with the ice. Some days we simply drifted north-westwards with the pack, the engines stopped. At times the ship got nipped and we had to dig her out of the ice! A game of rugby on a large floe and an audience with Emperor Charlie van der Merwe provided some of the entertainment during those days. The emperor penguin answered "Ja-a-a!" when we asked him if he really was Charlie van der Merwe.

On 24th January, half-an-hour after midnight the midnight sun—we were more than 6° W—touched the horizon and at 04.30 GMT we finally broke through the pack ice to get our first glimpse of the ice shelf of the Great White Continent. It was just after noon, four weeks after we left Cape Town, that we sailed into Polarsirkelbukta, 70° 15' S, 2° 51' W—to the great relief of Andrew Venter's SANAE IV . . . and Skroef van Zyl's SANAE V?

I would like to add that the "observers" are very grateful for the privilege of having been able to sail with the RSA to Antarctica and we sincerely hope that the Department of Transport will continue the practice of allowing a few persons with special interest in Antarctica to join the ship. I have a few suggestions to make. Although space is very limited on the ship, more research can be done during the voyage. Not only will this keep the passengers occupied, but valuable scientific observations can be made. This voyage occurs but once a year through seas sparsely covered with meteorological, oceanographic and other observations. Research can be done as proved by the neutron monitor team from Potchefstroom. More meteorological instruments should be provided to the RSA, e.g. a bathythermograph, a sea temperature recorder, an anemometer, etc. Captain McNish shows keen interest in research and, amongst other things, he helpfully supplied whatever literature there was available on the subject of the Antarctic. Incidentally, the captain's uncle was carpenter on Shackleton's ship, the "Endurance". A library on board the RSA containing technical and non-technical material appertaining to the animal life, ice and other relevant subjects on Antarctica ought to be a great asset to both the observers and the expedition members.

## EXPERIENCES AND WORK OF SANAE III, 1963

By A. M. VENTER

After over 13 months' stay on an ice shelf of Antarctica, it felt a luxury to relax in an easy chair in a modern cinema or to feast your eyes on the variegated colours of nature. These are a few of the conveniences and splendours of civilisation we had to do without; nevertheless there is nothing to compare with the calm grandeur and beauty of Antarctica.

Being poor sailors the voyage to SANAE was a nightmare for some of us and the infamous Roaring Forties and Terrible Fifties took its toll.

Our slow progress through the pack ice provided ample time to admire the spectacular tabular icebergs and to shoot 11 seals—mostly crabeaters and Weddell seals—to serve as food for the huskies at the base. The notorious leopard seal however, kept clear of our sight.

Our journey southwards took 20 days and on arrival we were most heartily welcomed by members of SANAE III. The tedious task of unloading the 150 tons of provisions, petrol and diesoline drums left us just about spiritless. On 23rd January, 1963 at 02.00 GMT we took leave of the RSA.

A trip to the mountains was our first major task; four of us left the comfort of the Base on a 3-weeks' trek. En route from Dassiekop to Leeukop seven crevasses were crossed—some being 12 to 15 feet in width. Observations at a later stage indicated that these crevasses practically terminate near Dassiekop where they could be crossed with ease and safety.

As from Muskeg Depot we set out in a WSW direction to Tommeliten and Lorentzenpiggan where we spent two weeks collecting geological samples. Furthermore meteorological observations were taken at regular intervals, while the ramsondes, spire boreholes and proton magnetometer were other tasks that had to be performed. All the same, we spent a busy and enjoyable three weeks in the fields.

Before the actual onset of the winter we had two major tasks to perform—the dog tunnel had to be extended by 50 feet and one of the Bolinder diesel engines had to be transferred from Norway Station to SANAE. After a week's hard labouring we were reassured that our dogs would spend the winter in comfort. To shift the Bolinder, five men had to work continuously in cold weather for 10 days. At last we had both the Bolinder and the Redifon transmitters removed. We awaited the appearance of the first Aurora Australis eagerly; it appeared for the first time on 14th April but was rather disappointing. The geophysicist spent hours in a temperature of  $-30^{\circ}\text{C}$  or even lower, recording these phenomena.

Efforts were being made to obtain more accurate drift snow measurements. The apparatus designed for this purpose in Pretoria did not record successfully. The radiosonde ascents at 24.00 GMT presented the usual difficulties during storms.

The ionospheric transmissions interrupted every 15 minutes some music or an important news flash, but we got used to it. With the partial eclipse in January 1964, these transmissions were repeated at 5-minute intervals.

July was our worst month as far as the weather was concerned. At 06.00 GMT on the 1st we experienced the worst gale of the year with a peak velocity of 105 knots and on 26th July, four days after the sun appeared above the southern horizon the thermometer registered the minimum temperature of  $-46.3^{\circ}\text{C}$ .

After the winter, we undertook journeys to Polarsirkelbukta, the Sub-station and Otterbukta. Early in August the pack ice in Polarsirkelbukta disintegrated and open water was visible. However, a week later the ice was driven back by the wind.

The crevasses on both sides of Polarsirkelbukta have enlarged considerably and it appears that the gradient to the east is definitely steeper. Apparently a part of this Bukta will be carved off as an ice-berg in the near future.

Two of our dogs died during our stay—Oscar, the leader, had to be put to sleep because of festering wounds and Bruno's death as due to peritonitis.

Monthly blood samples were taken by our Medical Officer from each member and analysed; the vitamin content of our food was constantly checked and ever so often an aching tooth had to be extracted or a cut finger bandaged.

The hospital was extremely well equipped—from suntan lotion to the most delicate surgical instruments. The value of the hospital proved itself on two occasions when members of the expedition were seriously injured in accidents. On one of these occasions an emergency operation which resulted in the amputation of two fingers had to be performed on the Senior Mechanic.

Our second journey to the mountains started on 29th October after we had to cancel our departure several times due to stormy weather. The greater part of the 51 days was spent in the vicinity of the Istind complex, south-west of Jekselen; and to the west at Valterkulten, Nupshamrane, Auruppen and Flarjuven. It was here at Flarjuven that we came across a rippling mountain stream to our surprise.

Eventually it was our turn to welcome back the RSA; a heavy heart we took leave of our two friends who volunteered to stay on for another year.

I would like to conclude with this quotation from *The Crossing of the Antarctic* by Sir Vivian Fuchs:

"This was the end of the expedition as the public saw it, but for us it is the beginning of a new endeavour—for now we must produce the results, which we believe, will justify the early faith and vision of all those who supported us in the beginning and sustained us to the end."

## Nuus van die Vereniging

### Vergadering van 24e Februarie 1964

Na die rustyd van die somermaande is die eerste vergadering van die jaar op die 24e Februarie in Pretoria gehou, met 27 lede en 4 nie-lede aanwesig. Spesiale verwelkoming is gerig aan Mnr. A. M. Venter leier van SANAE IV, wat so pas teruggekeer het, Mnr. Nieman wat een van die twee verteenwoordigers van die Vereniging op die RSA was en Kommandant W. J. B. Chapman voormalige voorsitter van die Vereniging, wat na iets meer as 'n jaar weer van Kaapstad na Pretoria verplaas is. Prof. K. van der Walt het die Konstitusie en reëls van optrede van die Toekenningskomitee vir die Suid-Afrikaanse Antarktiese Medalje verduidelik en aangekondig dat die eerste medalje aan Hannes la Grange toegeken sal word. Mnr. Sean Kavanagh, landmeter van SANAE III, was spreker van die aand oor die onderwerp *Landmeting in Antarktika*, 'n opsomming waarvan in 'n volgende uitgawe van die *Bulletin* geplaas sal word. Hy het ook 'n aantal uitstekende kleurskryfies van Antarktika vertoon.

### Nuwe Lede

Die volgende nuwe lede is aanvaar:  
L. A. Whitehead (Departement Buitelandse Sake, Pretoria).  
H. R. Hiddes (Ingenieur, Reunies Coasters, Durban).  
Prof. Lester King (Geologie Departement, Universiteit Natal, Durban).  
J. P. Louw (Stokrybestuurder, Wellington).

### Model van Antarktika

'n Gipsmodel van Antarktika is vir die Vereniging voltooi deur Mej. H. Beatson van die Aardrykskundefakulteit van die Universiteit Witwatersrand. Die model sal gehuisves word by die Permanente Wetenskaplike Uitstalling, Skouterrein, Pretoria.

### Dasse

Die dasse van die Vereniging is uiteindelik vervaardig en sal eersdaags uitgereik word aan diegene wat reeds betaal het, sodat u u das reeds behoort te hê wanneer hierdie *Bulletin* verskyn. Daar sal nog 'n aantal dasse beskikbaar wees teen R2.00 stuk plus 10c posgeld.

### Bouvet-verkenning

Vier lede van die Vereniging is onder diegene wat gekies is om op 21e Maart met die RSA na Bouvet-eiland vir verkenningsoeëindes te vertrek. Hulle is Dr. J. J. Taljaard (weerkundige en leier), Mnr. A. B. Crawford (weerkundige en deskundige op landings per boot), Mnr. D. C. Neethling (geoloog) en Mnr. F. McCall (P.W.D.).

## News from SANAE and the Islands

### SANAE

When the RSA departed from Cape Town on 27th December she had 26 scientists, artisans and observers of various denominations on board, apart from the normal crew. Winds were strong and seas high in the Roaring Forties but by the time the ship reached Bouvet Island (1,600 miles from Cape Town)—most of the "stowaways" had already crept from their bunks and showed up on board. After that, everybody remained good seamen. The RSA battered its way through thick pack ice and got stuck on many occasions, and eventually Captain McNish established his record but not for the shortest journey. In Polarsirkelbukta on 24th