



SANAE to SÖYLA

E. de Ridder, Geologist SANAE VII (1966)

Members of the combined geomagnetic and geological field party waited impatiently for the end of the Antarctic winter in order to set forth on the expedition to the mountains, where their actual sphere of interest lay.

Winter was occupied by multifarious duties, detailed preparations and studies. Air photographs and maps were studied assiduously, the details being virtually imprinted on their minds. Fuel and food requirements were meticulously calculated and packed. The muskies were checked and worn parts replaced; the dog sledges were rebound. Not a single article, no matter how small, should be included unnecessarily because of weight and space. Even more important, no essential article, no matter how large, could be left behind, because once having departed there was no return to the base until the general aim of the expedition had been fulfilled.

Shortly after the sun re-appeared, practice runs with the dogs and their sleds were started to get the dogs loosened up after their long spell of winter inactivity and to imbue them with a spirit of teamship and obedience, as well as to accustom them to the unrestrained proximity of their canine neighbours.

The expedition had a multi-disciplinary composition because it wanted to collect concurrently, information over as wide a field as possible in a practically hitherto unknown portion of this ice-covered continent, where only the Norwegian-British-Swedish expedition of 1949-1952 and members of SANAE VI (1965) had worked before on foot. The geomagnetist wanted to estimate at predetermined points the absolute magnetic forces; geological cartography and sampling of new and hitherto

unexplored nunataks could assist to lift the veil over the past; boreholes and pits for measuring snow accumulation over past decades had to be sunk; a survey of ice contours to determine the movement of the ice-cap—all these determinations and subsequent studies could assist the glaciologist to elucidate the drift and nature of glaciation. Such information would help to establish whether the ice-cap was increasing or decreasing. Geophysical work in the field would be done with a gravimeter and a magnetometer to give an idea of the nature of the rock surfaces underneath.

The route along which and the area where this multi-disciplinary survey would be carried out were towards and at the *Borga* mountain range (see map *Ant. Bull.* No. 17), a mountainous area of approximately 1,500 sq. km. about 340 km. south of SANAE. After a period of blizzards during September, the weather only settled early in October and Harold Poole (geomagnetist) and Eddie de Ridder (Geologist) left by dog-sled on 10th October. Five days later the mechanized transport party, consisting of Sean Kavanagh (leader and land surveyor), Henry Fulton (diesel mechanic) and Horst Bastin (geologist) followed, using one muskie and a Polaris mechanical sled. The intention was to join up as soon as possible and thereafter to travel together, the one party being a support to the other.

Weather conditions soon changed to their foulest so that the sledging party had to spend much time in their sleeping bags. Radio contact was poor, erratic and sporadic, so that news from the base and the other party could only be received with the greatest difficulty. In spite



Beyond the vast stretches of moraine tower the *Borga* peaks.

of the inclement weather the dogs proceeded unflinching, though slowly, and after weeks there still was no sign of the mechanized party. Tobacco supplies had been exhausted for days already when only on 6th November, at *Jekselen depot* (72°S , $2^{\circ} 40'\text{W}$) 200 km. south of SANAE base, did the other party catch up. The *Polaris* sled was missing due to irreparable damage sustained en route and the muskeg had been kept going only by the genius of the diesel mechanic. It is indeed an indisputable fact that the diesel mechanic is a most indispensable person and the greatest benefactor of Antarctic mankind. The jubilation at the reunion was profound, not only to know that all were safe, but to be able once again to blow thick clouds of blue tobacco smoke into the skies—the two of us with the dogs having been denied that pleasure for more than two weeks!

Work started in earnest in the immediate vicinity, which was well known to many a South African expedi-

tion (*Ant. Bull.* No. 17). After one week of geological sampling, depot laying and other activities, the journey was continued to *Pyramiden*, a nunatak about 280 km. south of SANAE. Way off we could already distinguish its characteristic flat table-top summit.

The paths of various expeditions have crossed and met at this lonely outpost. It was visited for the first time on 18th January, 1950, by members of the Norwegian-British-Swedish expedition by air from their base at Maudheim. During November and December of the same year they established their main advance depot on its slopes and from there carried out fieldwork in that area and for 250 km. away to the south. They left behind at this depot substantial supplies after their return to Europe. On 31st December, 1960, four members of the Vth and VIth Russian Antarctic Expeditions, viz., D. S. Solov'ev, V. I. Bardin, S. A. Zamkov and D. M. Khromikhen landed there again with an AN-6 plane. In 1965 members of SANAE VI added to the store of supplies. This point was the most southerly of their traverse.

The first thing we did on our arrival was to examine the depot itself. We listed the articles and during the rummaging a broken bottle, partially buried under rubble and snow was found. It contained a note describing the origin and history of the depot. Amongst the supplies we found some home-made bread which we heated on a primus and it was quite tasty, in spite of its Antarctic sojourn of 16 years. We pitched camp at this historical spot and, inspired by the reminiscences of bygone expeditions, completed our surveys in that

The N.B.S. depot at *Pyramiden*.



locality within one week. Then off we went once more further south.

We crossed the Viddalen, a 40 km. wide glacier, on our way to the *Borga Mountains*. From far off we saw the towering heights of the *Borga* peaks and the nearer we advanced the more impressive they became. The gently rising slopes of snow reach a height of 2,000 meters above sea level. Perpendicular rock faces, 500 to 700 meters high, and some of them a few miles long, spanned the horizon. Moraine stretches for miles across the plains and is reminiscent of ploughed fields. Glaciers slide down the steep rugged slopes pushing their icy tongues ever downwards until finally they disappear into the depths of the snow below. In terms of geological time, this is a quick-changing part of the globe, renewing scenic outlays more often than those parts of the world where contours are not moulded in ice. This is indeed God's newest country!

By 22nd November we had deposited our 8 tons of supplies at the provisional main camp and we started with our work. The resplendent environment and perfect warm sunny days made work a privileged pleasure. Even so, the mist did at times roll over the mountain tops forming a blanket of ominous silence, which often was a foreboding of approaching blizzards. The wind would rise to a phenomenal speed and howl through the valleys and across the rocky ledges—one could then only sit and wait and hope for better days. In spite of this, work progressed well. Here too we found signs of the Norwegian-British-Swedish Expedition's activities of long ago. The network of stakes erected by them in the blue-ice area to measure from time to time the rate and direction

of movement of the ice-cap was still, after 16 years in excellent condition. Their positions were determined and we extended the net, such follow-up studies over a long period being of inestimable value in determining glacier movement.

With the knowledge that we would not be able to celebrate Christmas on the exact date, we had our Christmas dinner a week before and Henry Fulton was the cook of that memorable dinner. He produced stuffed turkey, rice, potatoes and other vegetables, and, to top it all, canned peaches and cream with some exhilarating refreshments. After many hours' celebrating on his miraculous creations, the team retired to "Operation Sleeping Bag", satiated and well satisfied.

Having celebrated our Christmas, the last shift of sampling and surveying was carried out. The amount of material was impressive, the rock specimens being numerous and bulky, and much information was obtained to enable greater detail to be added to the maps. On 31st December we bade farewell to the *Borga* in fine sunny weather.

The warm weather during the previous weeks had softened the surface thus impeding travel, but clear days and uneventful mechanical and dog behaviour were on our side. On the evening of 3rd January, 1967, the mechanized party arrived back at SANAE and two days later, after a "constitutional" of 88 days, the dog-sledging party clocked in—back "home"—tired, though pleased with their efforts. It had been a joy to have worked in a part of God's newest country, unrivalled for its cleanliness and freshness, where a continuous kaleidoscope of changing scenes met the eye.

UITTREKSELS UIT VERSLAG VAN DIE VOORSITTER

Gelees deur mnr. Marten du Preez, uittredende voorsitter
van die S.A. Antarktiese Vereniging, 2 Mei, 1967

Gedurende die afgelope jaar het ons ses vergaderings gehad. Mnr. S. H. Engelbrecht, direkteur van die Weerburo en leier van die Bouvet-ekspedisie, dr. J. Taljaard, dr. W. Verwoerd, dr. O. R. van Eeden, direkteur van Geologiese Opname, en mnr. D. Neethling het voordragte gelewer oor die suksesvolle ekspedisie na Bouvet-eiland gedurende Maart-Februarie, 1966 (*Ant. Bull.* 14/15). Dr. W. H. Pollak, geoloog van SANAE VI (1965), het 'n lesing gelewer oor "Tidal effect on a floating ice-shelf—

gravimetric determination" (*Ant. Bull.* 16); mnr. E. M. van Z. Bakker oor "Dierelewe op die Marion- en Prince Edward-eilande" (*Ant. Bull.* 18); mnre. D. Neethling, Andrew Venter, Marten du Preez en dr. André van der Merwe oor verskillende logistiese aspekte, ysskeure en mediese toestande met betrekking tot Antarktika, en mnr. Sean Kavanagh, leier van SANAE VII het 'n toespraak in Maart hierdie jaar gelewer onder die hoof "Review of the activities of SANAE VII". Verder is

NORWEGIAN-BRITISH-SWEDISH

ANTARCTIC EXPEDITION 1949-1952

ADVANCED BASE

THIS NUNATAK WAS FIRST REACHED BY A RECONNAISSANCE PARTY, TRAVELLING BY DOG-TEAM, ON OCTOBER 25 1950.

A DEPOT OF APPROXIMATELY 9 TONS OF MATERIAL AND SUPPLIES WAS LAID BY MOTOR-TRACTOR ("WEASEL") DURING NOVEMBER AND DECEMBER, 1950.

FIELD PARTIES, TRAVELLING BY DOG-TEAM, OPERATED FROM THIS DEPOT FROM JANUARY 6 UNTIL APRIL 28, 1951, AND BY DOG-TEAM AND WEASEL FROM OCTOBER 15 UNTIL DECEMBER 23, 1951.

THE DEPOT WAS EVACUATED DECEMBER 23, 1951, AND ALL UNUSED STORES CACHED ON THE NORTHWEST RIDGE OF THIS NUNATAK.

THE FOLLOWING MEN HAVE VISITED THIS DEPOT:

BERTIL EKSTRÖM

GORDON ROBIN

JOHN SNARBY

STIG HALLGREN

NILS ROER

CHARLES SWITHINBANK

PETER MELLEBY

FRED ROOTS

OVE WILSON

ALAN REECE

VALTER SCHYTT

K. FRIIS-BAASTAD

KJELLBERG

} (BY AIR, JANUARY 18, 1951)