

ESTABLISHMENT OF THE SOUTH AFRICAN METEOROLOGICAL STATION ON MARION ISLAND, 1947-48

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Between 1939 and 1945, plans were afoot in the Union of South Africa for the establishment of meteorological stations on Gough Island in the South Atlantic, and on one of the Prince Edward Islands in the southern Indian Ocean. Shortage of shipping and staff caused these plans to be shelved in 1945. In 1947, Field-Marshal Smuts, who was then Prime Minister of the Union, decided to annex the Prince Edward Islands without delay. These islands, which consist of Marion Island and the smaller Prince Edward Island, are situated in approximately lat. 47° S., long. 38° E., half-way between South Africa and Antarctica, and have always been regarded as British, although no records of any sort of annexation ceremony can be traced.¹

In December 1947, therefore, the frigate H.M.S.A.S. *Transvaal* recalled her crew from Christmas leave and sailed south. Bad weather delayed a landing for several days, but eventually, on 29 December 1947, the commanding officer of the *Transvaal* landed on a rocky beach on the eastern side of Marion Island and hoisted the South African flag. A proclamation of provisional occupation was read and a small naval party was left in charge. Six days later a landing was made on Prince Edward Island, but in this case no party was left ashore. The *Transvaal* then returned to South Africa.

In the meantime, plans were going ahead at Cape Town for the construction of prefabricated houses, and the Department of Transport purchased hundreds of tons of stores and equipment for the proposed meteorological and wireless stations on the islands. The undertaking was known as Operation "Snoektown".

At the same time, steps were taken to recruit men for the party which was to be left on Marion Island throughout the coming winter. A. B. Crawford, who was then Meteorological Officer at Tristan da Cunha, was invited by radio to take charge of the new project. It was decided to take six islanders from Tristan da Cunha to Marion Island, on account of their skill as boatmen and general adaptability. Crawford, with six islanders, left Tristan da Cunha on 12 January 1948 in the frigate H.M.S.A.S. *Good Hope*, bound for Cape Town, where the party stayed five days before their departure southwards. It is interesting to mention that the islanders—all over the age of forty—were paying their first visit to civilisation, and saw for the first time in their lives trains, motor cars and brick houses; they had never before seen even a horse and cart!

¹ A full account of the history of the Prince Edward Islands, and of the events leading to their occupation in 1947, is given by John H. Marsh in *No pathway here*. Cape Town, Howard B. Timmins; London, Hodder and Stoughton, 1948.—Eds.

About this time a second frigate, the *Natal*, went to Prince Edward Islands to confirm the occupation carried out by the *Transvaal*. This time a flag was hoisted ceremonially on each island, a salute of guns was fired from both ship and shore, and the success of the future occupation was toasted in the best South African sparkling wine.¹

The *Gamtoos*, a small government coaster of 800 tons, belonging to the Guano Islands Department, was fitted out with special reserve bunker space and loaded with stores and building materials for Marion Island. She arrived about the middle of January, bringing a party consisting of an inspector and two carpenters from the Public Works Department and a unit of about twenty men of the South African Engineering Corps, who were to assist in the building and landing operations.

Adverse weather conditions and the lack of proper landing facilities delayed the unloading of stores, and a labourer was drowned when one of the boats overturned in the surf.

Meanwhile, the original occupation party had put in valuable time carrying out a local reconnaissance, and had built a most ingenious landing stage which was slung on wire ropes from the top of Gunners Point. It was connected to the beach by a cat-walk, and enabled boats to pull up alongside, and so unload stores more easily. Prefabricated building sections, which weighed over 800 lb. each, were towed inshore and drawn on land by winch.

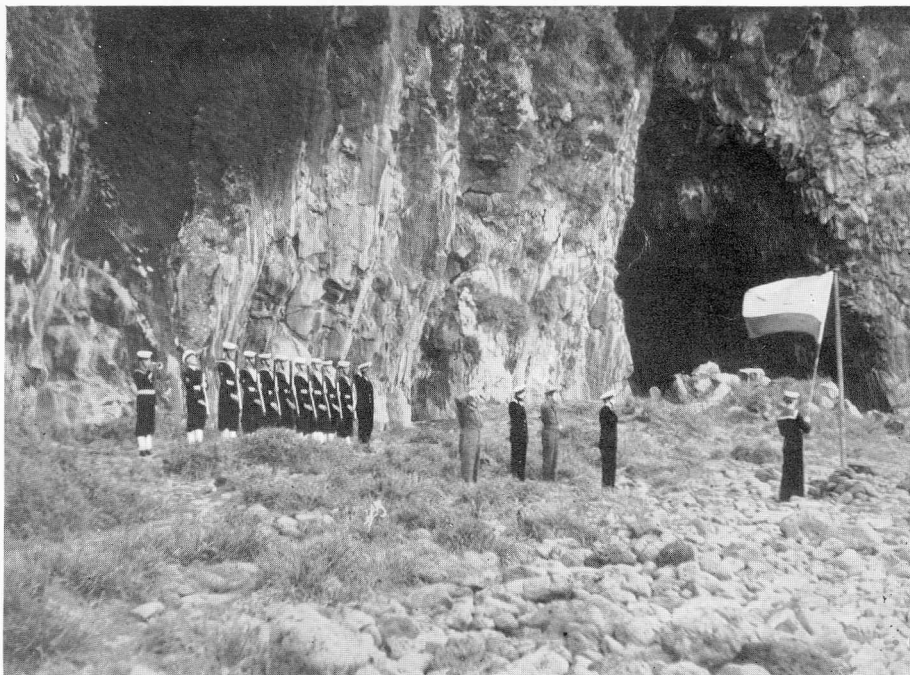
The remaining five members intended for the permanent party joined Crawford's group in Cape Town, and on 31 January all arrived at Marion Island in the *Good Hope*.

Throughout the next few weeks all energies were concentrated on the erection of the buildings for the permanent party, consisting of five wooden huts, four of which, 30 ft. long by 20 ft. wide, were used respectively as the meteorological station, wireless station, beach store and Tristan Islanders' house. The fifth hut, 60 ft. long, was called "Governor's House", and provided living quarters for the staff. All the walls were 6 in. thick, consisting of three layers of wood with asbestos wool packing between to keep out the cold.

Building operations were greatly hindered owing to the fact that the lower slopes of Marion Island are extremely swampy, and the ground only hardens in frosty weather. Extra supplies of wood had to be requisitioned, and foundations for the buildings were made by sinking specially treated piles into the soft peaty soil. These were easily pushed into the ground by hand until they reached rock bottom. The buildings were bolted securely to these and no cement was required.

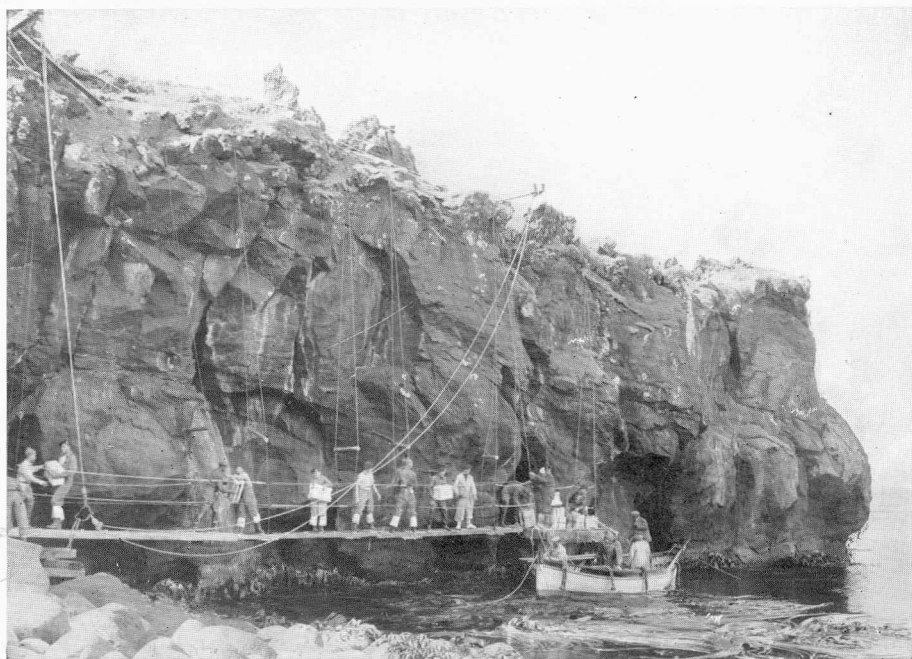
It had originally been decided that a second party should be based on Prince Edward Island, and accommodation and a second radio station established there. A large motor boat, and two canvas boats from Tristan da Cunha, formed part of the expedition's equipment. However, the difficulties experienced with the weather and the lack of sheltered bays and landing beaches on Prince Edward Island made it evident that such plans, if carried out, would

¹ The text of the South African proclamation on the Prince Edward Islands, 24 January 1948, was published in the *Polar Record*, Vol. 5, Nos. 35/36, 1948, p. 243-44.



Photograph Ken Sara

The ceremonial hoisting of the Union flag on Prince Edward Island
on 24 January 1948



Photograph John H. Marsh

The landing-stage and catwalk, Marion Island

*Photographs reproduced from "No Pathway Here", by John H. Marsh. Cape Town: Howard B. Timmins;
London: Hodder and Stoughton, 1948*

almost certainly end in disaster. Gales spring up very quickly in these latitudes, where the barometer falls below 980 mb. several times during one season. The plan to establish a second party on Prince Edward Island was therefore abandoned; the total party was reduced, and two radio operators were sent back to South Africa.

On 8 March the *Norse Captain*—a 3000-ton cargo vessel under charter to the South African Government—arrived with further stores, and work was hastened. On 20 March the *Norse Captain* and *Natal* left, as the buildings were ready and the radio in operation.

The permanent party of ten consisted of a meteorological officer in charge, a wireless mechanic, a wireless operator, a medical orderly from the Union Defence Force, and six Tristan Islanders.

Weather reports were sent to South Africa two or three times a day and wireless contact was eventually established with the Australian meteorological station on Heard Island 1000 miles away. Weather reports and other valuable items of scientific interest were exchanged daily. To relieve the monotony, the South Africans were challenged to a chess match, which was played between the two islands by wireless. One move was signalled each day, and the match went on for three months.

In spite of a rigorous winter, the party was comfortable in its quarters. The Department of Transport had provided the best possible protection, and the food, though mostly tinned, was of excellent quality. Photographic equipment, a ping-pong table and a large library of books were provided to tide the party over the winter months; a radio-gramophone with a liberal selection of both classical and "swing" records was available.

During the winter months, further building was carried out and improvements in accommodation were made. All buildings were electrically wired and field telephone equipment installed. Two or three radio-sondes were made by the wireless operator, but the party was not suitably staffed for work of this nature and the accommodation was unsuitable. However the experiments paved the way for a more regular service, which was instituted after the first relief.

With the aid of four of the Tristan Islanders, who acted as bearers and scouts, a survey was made of three-quarters of the island, and the resultant sheets have been handed over to the Admiralty. The previous chart of Marion Island was based on a running survey made by H.M.S. *Challenger* in 1873, and naturally the use of a theodolite ashore disclosed inaccuracies. The central peak, 3890 ft. (1190 m.) above sea-level, was scaled for the first time and a copper flag left there to record the event. With the approval of the South African Government it was named "Jan Smuts Peak" in honour of the Prime Minister of the day.

Astronomical observations were made over several weeks when the weather permitted and the position of Marion Island was determined within half a second of arc. It was found that the longitude was correct, but that the position of the island had been charted more than a mile too far to the north.

Wild life on the island included penguins, petrels, albatrosses and elephant seals. A collection of antarctic birds was made, and over fifty skins brought

back to the Union. These represented twenty-two different species, twelve of which were new breeding records. The most interesting bird studied was the little-known Blue Petrel (*Halobaena caerulea*). The collection has been divided between the Natural History Museum in London and the South African Museum in Cape Town. A film in black and white was also made, which showed, among other things, all the stages in the life of a young Wandering Albatross (*Diomedea exulans*); the courtship of the parent birds; the hatching of the egg, and the feeding of the young chick.

During the winter, a storm of exceptional severity from the north-east washed away the greater part of the kerosene supplies, on which the party was dependent for heating and cooking, and most of the gasoline. At the end of August 1948, H.M.S.A.S. *Bloemfontein* arrived with relief stores and staff. There has been a second relief since then, and at the time of writing the *Good Hope* is loading stores for the third.