



# ANTARCTIC NEWS BULLETIN

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This was written in 1909

"Some day doubtless - and, let us hope, some day not far in the future - there will be a permanent meteorological station on one of the fine harbours of the Auckland Islands, with another on Campbell Island, and perhaps still another on Cape Adare, connected with the first and with New Zealand by wireless telegraphy; and if to these stations there be added suitable accommodation and appliances for the collection, preservation, and observation of geological, zoological and botanical material there will be a ready means afforded for gathering in that rich harvest of results that lies ready for the worker; and earnest workers will not be wanting. The commercial value of such stations would be considerable; their value, judged by the importance of the scientific problems they would help to solve, would be beyond calculation."

Dr. Charles Chilton in "The Sub-Antarctic Islands of New Zealand."

That was 43 years ago. What has been done?

## NEW ZEALAND'S SUB-ANTARCTIC OUTPOST

### The Story of Campbell Island

The M.V. "Holmburn" left Dunedin on July 20th with a relief party for Campbell Island, where the Civil Aviation Branch of the New Zealand Air Department, in co-operation with the Meteorological Service and the Department of Scientific and Industrial Research maintains the southernmost ionosphere reporting station in the world. Relays of New Zealanders have been quietly living and working on this distant outpost ever since 1941, but little publicity has been given to their activities.

#### "Desolate and Dripping Island"

Campbell Island lies in approximately latitude 53°S and longitude 169°E, about 370 miles south of Stewart Island. It is therefore in about the same latitude as Australia's Heard Island and much further south than the French outpost, Kerguelen. The main island is about ten miles by eight and has an area of 42 square miles. Two big inlets on the east coast bite deeply into it, one, Perseverance Harbour, almost cutting the island in two. There are a few off-lying rocky islets.

The island, which is walled about by forbidding cliffs, is largely covered by tussock and similar tough, low-growing plants, with heavy scrub in sheltered places on the lower levels, but no trees. The island rises in the south-east to a height of 1800 feet. The main characteristics of the weather are the high westerly winds, the inordinate amount of cloud and the frequency of rain. Between 1941 and 1945, rain fell on the average on 320 days in the year. A scientific observer in 1909 summed it up neatly, if somewhat unfairly - he was only a few days on the island - "Sunshine does not prevail for many hours in the year". The temperature is uniformly low, but is never extremely cold. The mean summer temperature is about 50°F, the winter about 40°F.

#### An ill-fated discoverer.

The island was not discovered until 1810. Its discoverer was Captain Hasselburgh, sent out by Campbell & Co., a Sydney sealing firm, in the

136 ton brig "Perseverance" to search for unexploited sealing grounds. He made two discoveries, naming one after his vessel's owners and the other after Governor Macquarie of New South Wales. Sealers quickly swarmed down on them, and Campbell Island did a steady trade in seal-skins for many years. Later in the year of its discovery, however, Captain Hasselbrough himself was drowned with two others, a Norfolk Island girl and a boy of 12, when returning in their boat from the island to the ship. And the only recorded wreck on the island was that in 1828 of the "Perseverance" herself.

They came, they saw, they hurried on.

Of the many visits to Campbell Island in the course of Antarctic voyages, perhaps the most interesting is that of Balleny on his way south from New Zealand to discover the islands on the Antarctic Circle which bear his name. Balleny reached Campbell Island on January 10th, 1839, and there rescued three men and a woman "in a most wretched plight" who had been marooned on the island from the "New Zealander" four years before. Balleny records that he agreed to pay them ten shillings "for every prime skin" of the 170 they had collected during their miserable years on the island. Here also, in what he calls "Preservation" Harbour, by a strange coincidence he met John Biscoe in the "Emma"; Biscoe, who eight years earlier had been the first man ever to sight and recognise as land the main mass of the Antarctic continent, at Cape Ann.

Ross, diverted from his original route by the discoveries of D'Urville and Wilkes, made for the Auckland Islands and Campbell Island, which he reached on December 13th, 1840. Both "Erebus" and "Terror" went aground in Perseverance Harbour, but were safely refloated, and Ross left on the 17th, steering due south on the Campbell Island meridian to make the discoveries which were to open up the Antarctic continent to geographical research.

Another ship to ground on a shoal off Campbell Island was the "Antarctic", on a preliminary whaling cruise in 1894 prior to conveying south the expedition under H.J. Bull which made the first landing on the main continental mass. The "Antarctic" had to beat up to New Zealand to effect repairs.

From 1872 the New Zealand Government despatched a vessel annually to inspect the various island groups and relief depots for castaways were established. But the first systematic study of Campbell Island was made in 1874, when a French expedition for the observation of the transit of Venus spent a considerable time there. In 1907 a party of 14 men including ten New Zealand scientists camped on the island from November 17th till 25th. The reports of these scientists, with those of their colleagues on the Auckland Islands, were published in two imposing volumes "The Sub-Antarctic Islands of New Zealand". The annual inspections were discontinued in 1927.

Then they came to stay.

Campbell Island lies well to the south of the Great Circle Route, so it has had, unlike the Aucklands, no tragic sequence of wrecks. But in 1868 the Southland provincial government sent a party to make a thorough search of the various islands for possible castaways: a depot was set up at Perseverance Harbour and some pigs were liberated. Captain Norman, on a similar mission from Victoria three years earlier, had also placed some pigs on the island. Sheep were introduced about 1890 and from 1896 till about 1929 a determined effort was made to run a sheep-farm. Buildings were erected, including a six-roomed house, and the 1907 scientific party recorded that there were then some 8,000 sheep under four shepherds, with additional temporary labour for the shearing season. The farm has long been in ruins, but sheep are still running wild on the island.

Cattle were also introduced, probably during the sheep-run period, and there are about a dozen still on the island. Goats, rabbits and guinea-fowl have also been liberated, but these, like the pigs, have not survived. Rats, however, are present in uncomfortably large numbers.

Outpost of War.

The present station was first established early in 1941 as one of the war-time coast-watching stations of the "Cape Expedition". Owing to the constant threat from raiders and the fear that German pocket-battleships might make use of such uninhabited islands for refuelling etc., the New Zealand Government decided to establish stations on the Auckland Islands and Campbell Island. The work was entrusted to the Aerodromes Branch of the Public Works Department, with the Navy, of course, in operational control. So the "Cape Expedition" came into being.

The first party of volunteers, with provisions for three years and all the facilities for comfortable living under sub-Antarctic conditions, left Wellington on March 5th, 1941, on the schooner "Tagua". The sea-going launch "Ranui" followed a few days later, and was stationed at the Aucklands. At Campbell Island portable, double-walled, prefabricated plywood huts were erected at the head of Perseverance Harbour in lat. 52°32'S and long. 168°59'E: these are substantially the buildings still used. The party of four men was primarily concerned with coast-watching activities from daylight till dark, but meteorological observations were regularly taken and relayed to New Zealand. The party was later increased to five. At the end of each twelve-monthly period a relief party was sent south. The first group were civilians but later parties were attested as private soldiers. These parties included trained scientists and surveyors. Some men found the life so much to their liking that they volunteered for a second or even a third term.

#### The post-War years.

During the four years no enemy vessels were sighted. In fact, as far as Campbell Island was concerned, no ships were seen at all. When in 1944 coast-watching became no longer necessary, the Auckland Island stations were closed, but the one on Campbell Island, where meteorological observations had been made from the beginning and ionosphere records since 1944, was still manned as a meteorological and ionosphere reporting station and has been maintained as such to the present time. This work, with auroral observations and study of the bird and animal life on the island, has been the chief routine scientific activity of the station, but from time to time surveyors, naturalists and geologists have been stationed there to carry out work in their specialist fields.

During most of its existence the station has been run by the Aerodromes Branch, Ministry of Works, but control has recently been transferred to the Civil Aviation Branch, Air Department. The Campbell Island party has usually consisted of five men, a leader, a meteorological observer, an ionospheric observer and two radio operators, but with the installation of radio telephone the radio operators have been replaced by additional meteorological and ionospheric observers.

When the "Holmburn" sailed she carried a relief party of four, and also five other men who stayed on the island for about six weeks installing a radio-telephone which was officially opened on September 16th. New Zealand's southernmost post-office has also been established on the island, being opened for business on September 1st.

The "Holmburn" will leave Wellington again for Campbell Island shortly, taking with her a replacement for Mr. B.D. Norton. The Island personnel will then be:-

Mr. C.P.B. Sewell - Officer in charge.  
Messrs. R.G.L. Hayes and  
T.D. Bannister - Meteorological observers.  
Messrs. R.J. Stanley and  
T. Talbot - Ionosphere observers.

#### HOW BIG IS ANTARCTICA

In an article in the Geographical Review on "Aerial Measurements in the Antarctic", Anastasia Van Burkelow points out the astonishing variation in estimates of the total area of Antarctica. While early geographers believed that "Terra Australis Incognita" extended right up into the temperate zone, in 1895 W. Sievers estimated the area of the continent to be a mere 253,668 sq. miles. Dr. W.S. Bruce was much nearer the mark in 1906 with an estimate of 5,482,620 sq. miles. By 1948 the outline of the continent had been fairly accurately charted and, in 1950, Hans Peter Kosack in Petermann's "Geogr Mitt" made the following estimates:-

Continental land only	-	5,058,356 sq. miles
Including the S. Orkneys and islands south of 63°S	-	5,087,534 "
Including shelf-ice	-	5,446,959

This latter figure amounts to two-thirds of the total area enclosed by the Antarctic Circle.

For comparison, it may be recalled that the area of Europe is approx. 3,800,000 sq. miles and that of Australia just under 3,000,000 sq. miles.

#### ARGENTINA ACTIVE

The Argentine task force which operated in the Antarctic during the 1951-52 season under the command of Captain Emilio Diaz has returned. The naval transport vessels "Bahia Buen Suceso", "Bahia Aguirre", the tanker "Punta Ninfas" and the hydrographic ships "Chiriguano" and "Sanaviron" entered the port of Buenos Aires on April 17th. The Ministers of the Navy and Army together with other high Government officials were among the large crowd which awaited the arrival of the ships. Members of the armed forces and civilian personnel who took part in the expedition were guests of honour at a luncheon given by the Navy Minister. President Peron personally greeted each of the men and thanked the task force on behalf of the nation.

A Naval detachment landed and established a new post at Bahia Esperanza (Hope Bay) at the eastern end of the Graham Land peninsula. Personnel on Deception Island, Melchior Island, the Orcadas (South Orkney Islands) and Almirante Brown (Danco Coast, Graham Land) were relieved and research work of various kinds was carried out.

On 9th May General Hernan Pujato gave an address on the expedition which he led for one year! He paid homage to the three members who lost their lives during the initial stages. General Peron presented the insignia of the Peronista Medal to members of the expedition.

The Argentine Ministry of Public Health has issued a resolution establishing a Centre of Physiopathology in the Antarctic to undertake "research on human life and other general aspects of cosmic phenomena in these regions".

#### AUSTRALIAN ACTIVITIES

Winter 1952 has turned the A.N.A.R.E. Station at Heard Island into a series of roofs showing above deep snowdrifts. How to keep the snow outside is one of the biggest problems facing the men. As a means of meeting this difficulty, snow steps have been built on all doors.

The weather has been rigorous - strong winds and low temperatures; the average wind velocity for June was 45 mph. Despite this the meteorologists have carried on the fine work done by the 1951 party and have not missed one radiosonde flight, which means that over 500 consecutive daily balloon flights have now been accomplished.

#### Aftermath of tragedy.

As there will be no means of getting replacements to Heard Island until the regular expedition relief party is sent next February, the twelve survivors of the fourteen-man party on the island will have to share the jobs of the two victims of the tragedy on May 26th.

There are two radio men who can do the work of Richard Hoseason, who was swept out to sea, but they will now have to be on duty most of the day and night.

Peter Brown has taken over the training of the huskies in place of "Jock" Forbes who was lost in the tragedy. He has the dogs out almost daily and has trained several good sledge teams. The outstanding lead-dog is Thurber, an old original sent down with the first pack of dogs in 1950. A dog with an almost human brain, Thurber weighs 120 lbs. Recently the dogs pulled two seal carcasses, weighing several tons, and three men a distance of two miles in fifteen minutes.

Forbes was also the chief boat expert, having learnt to sail small craft in a Scottish fishing village where he spent most of his early life. He only came to Australia about two years ago.

First news of the disaster reached Australia from French radio operators in Noumea who picked up a message from the French Antarctic base at Kerguelen Island.

#### Absent Comrades

Twenty two members of the "Anareans' Club" - all men who have been south - met for the annual mid-winter dinner in Melbourne on 18th July. They remembered their comrades Dick Hoseason and Alister Forbes, who were at last

year's dinner but lost their lives on Heard Island some months ago. Bronze memorial plaques are to be erected to their memory on the island.

#### Lighter moments.

Winter sports at Heard I. are in full swing, much to the envy of the previous party who did not enjoy such a good year. Skiing is quite popular, many tyros taking the field and so far they have provided no extra work for the doctor.

French Chef, Paul Teyssier, prepared a veritable banquet to celebrate Mid-Winter day. This was followed by the annual Beard Contest. By secret ballot, geophysicist Lindsay Ingall, was awarded the prize for the most aesthetic beard and meteorologist Lawrie Atkinson that for the most aesthetic moustache. The Beard Length event, judged by averaging the lengths of three representative hairs, was won, with 67 millimetres, by the Leader of the Party, biologist Les Gibbney, who also collected the trophy for the longest moustache, measuring 165 millimetres from wingtip to wingtip.

#### The Continental Base.

Only the lack of a suitable ship now prevents the establishment of an A.N.A.R.E. base on the Antarctic continent itself. To maintain such a base on a permanent footing a new diesel-powered ship is essential, a ship with great strength of hull and a surplus of power over normal requirements. During the last twelve months a new "ice-breaker" type of ship has been designed, and if the Government is prepared to finance the construction of such a vessel, Australia is in a most favoured position to set up a permanent station on the Antarctic coast south of her own shores. From here a party of, say, twenty men, well housed and equipped, could by the use of closed-in weasels such as are being used by the French Adelie Land expedition, cover hundreds of miles of the unexplored continent even in winter-time. By using aeroplanes or helicopters to drop men with sledges and stores well inland, even more extensive surveys could be made; this method has as yet hardly been exploited at all.

#### Debit and Credit

The Australian Government is advertising for leaders for the Heard Island and Macquarie Island stations at salaries of £1,052 a year. The men selected, who must be experienced in the handling of men, will be required to control all phases of expedition activity on the island concerned for a year.

The work on the two islands involves an expenditure of about £70,000 a year. The results have been twofold: some of immediate value, such as the provision of weather forecasting data for New Zealand and the southern Australian states; some likely to lead to significant developments ultimately, such as the study of cosmic rays, the acquisition of new knowledge about birds, seals and marine life, and information about aurora and the ionosphere.

A radio-physicist on Macquarie Island sends data to Sydney where the Ionospheric Prediction Service of the Commonwealth Observatory prepares predictions which tell radio-stations the frequencies they should use for their transmissions.

#### P.G. Law

The Director of the Antarctic Division of the Australian Department of External Affairs, Mr. P.G. Law, left Australia on 15th July, 1952, for France and England. He arrived back in Melbourne on 24th August, 1952.

#### J.N. WORDIE HONOURED

The American Geographical Society has awarded the Charles P. Daley medal to Dr. J.N. Wordie, president of the Royal Geographical Society and Master of St. John's College, Cambridge, for his services to Arctic and Antarctic exploration. Dr. Wordie was chief scientist on Shackleton's 1914-17 "Endurance" expedition.

#### ECHOES OF THE WHALING SEASON

##### Oil prices fall.

The increased production of vegetable oils and fats has brought about a catastrophic drop in the price of whale oil, reports the London correspondent of the Sydney Morning Herald. It seems that the days when all the world demanded whale oil and whale meat are over. In 1951 prices as high as £172 per ton were

paid in the open market. But Norwegian firms are said to have 90,000 tons of oil still unsold although it was offered to the British Government at £80 a ton. Some British companies were fortunate enough to have entered into a prior contract for £110 per ton.

The Norwegian Whale-oil Marketing Board later stated that the remaining 40,000 tons of Norwegian whale oil of the 1951-2 season had been sold for £72.10/- (sterling) per ton. Prices for the total 170,000 tons produced during the season ranged from £20 to £72.10/-; the average price was £82.10/-. The Board denies reports that foreign whale-oil of next year's production has been sold in advance at a price of £85 a ton.

#### Less Whaling next Season?

This price drop means that the costly well-equipped expeditions of recent whaling seasons will be quite uneconomic, and the smaller countries are unlikely to send expeditions south next season.

A London "Times" Trieste correspondent reports that work has been suspended on the 22,500 ton factory ship "Trinacia" which was being built at the Monfalcone shipyards for the Antarctic Company of Palermo. The company had obtained a subsidy of £5,500,000 from the Italian Government for the building of the "Trinacia" and twelve 1,000 ton chasers to form an Antarctic whaling fleet. Reasons given for the decision are the recent drop in whale-oil prices, the opposition by producers of butter and olive oil to the marketing of whale-oil in Italy, and the fact that fleets already operating are more than sufficient to attain the agreed quota of 16,000 blue-whale units.

The hull of the "Trinacia" will probably be turned into a tanker.

Norway is, according to an Oslo message, expected to send only seven fleets to the Antarctic next season. In 1951-2 the Norwegians had ten fleets operating.

On the other hand, it is reported in the "Fisheries Newsletter" that the largest factory-ship ever built in Japan has been completed at the Kamasaki dock-yards in Kobe. This new 17,000 gross-metric-ton ship is reported to have facilities for processing 37 whales daily.

#### Weather News from Whalers.

In the past, comparatively few weather reports have come from Antarctic whaling vessels, largely because the whalers were unwilling to give information of favourable conditions to rival fleets. If a new plan suggested by the Maritime Meteorological Commission is approved by the whaling countries of the world - Norway, Britain, the Netherlands, Russia, Japan, South Africa and Panama in the 1951-2 season - whalers will in future be able to send messages in code describing weather conditions in detail without giving other whaling fleets news of their location. In return they will, with other shipping in the Southern Ocean, receive more accurate and comprehensive meteorological information. Previously, there has been a great gap in weather-reporting points between Heard and Macquarie Islands, just where most meteorological developments affecting weather in Australia originate.

#### The Electric Harpoon

Reports about the development of the electric harpoon differ widely. A "West Australian" correspondent is assured that although each year a chaser has been equipped with an experimental electric harpoon operated by one of the best gunners, results have been "far from satisfactory". On the other hand, a London correspondent says there is "little doubt" that the Whaling Commission will insist upon the use of electric harpoons by all countries as soon as they can be installed.

#### The Whale - Universal Provider.

A by-product of whaling, a dark liquid of the consistency of molasses known as "whale solubles", is being tried out in Australia as a substitute for the short-of-supply meat-meal in the feeding of poultry and pigs. It is rich in the animal protein which is essential for the successful growth and production of pigs and poultry. A fin-back whale 64 ft. long caught by a Japanese expedition provided:-

10 tons of whale-oil  
16 tons of meat  
3½ tons of by-products  
1,000 lbs. of whale-bone.

A Japanese research specialist claims to have discovered a method of producing "Wool" from whale-blubber in sufficient quantities to meet at least 75 per cent of Japan's textile needs.