

THE ROYAL MARINE DETACHMENT

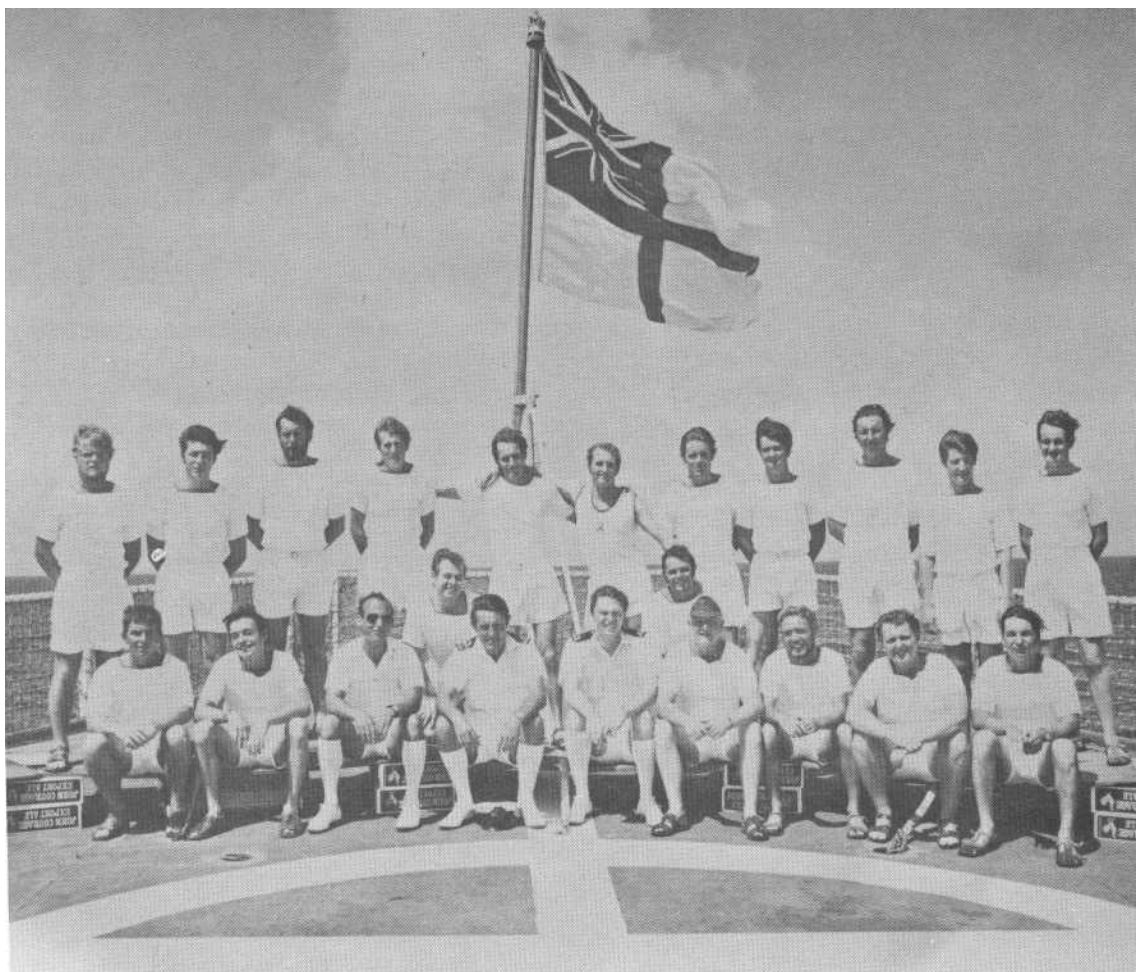
The Detachment was formed at Royal Marines Poole in Dorset on 1 Apr 74 (a good start by 13 Royal Marines from all parts of the Corps. The main contingent coming from 45 Commando RM and reputed to be Mountain and Arctic Warfare trained. At RM Poole we carried out 6 weeks detachment training. In addition to the usual shooting, drill and PT, we completed 2 weeks seamanship training onboard HMS ULSTER at Portsmouth.

On 4 Jun 74 the stalward warriors joined the ship in dry dock. We spent the next 3 months or so engaged in the age old sailors occupation of doing nothing while seeming to do a lot. Unfortunately we were not as successful as the seamen, our time being partially taken up by various courses leave and a fairly full military training programme.

On 3 Oct we sailed for points south after a short but eventful Portland 'work up', where the Detachment was noted for confusing the many volunteer casualties for looters and dealing with them as such. We would now like to make a written apology to those poor unfortunates.

Our first port of call was DAKAR, where we were looked after by the United States Marine Corps guards from the American Embassy. The next spell at sea was used as a 'drying out' period after a very hectic weekend socialising. Next on the agenda was the Brazilian port of SALVADOR' which I am sure some of the Detachment will remember for a long time to come. From here we moved onto MONTEVIDEO in Uruguay. Here we were fairly heavily engaged with ceremonial duties but still made up for lost time when ashore. Most of the runs ashore being marathon all night affairs, ending with some changing directly from run ashore rig into working rig.

On our 38th day out of Pompey we arrived at the throbbing metropolis of STANLEY in the Falkland Islands. It was Sunday night and none of the public houses were open, so we had a 4 mile hike up to Moody Brook where we were welcomed by the Royal Marines Detachment who form NP 8901. After another 4 days hard run ashore we passed onto the islands of South Georgia, where the Detachment was landed for 2 weeks training. This period was, I am sure, the most enjoyable part of the whole deployment as far as the Detachment was concerned. We had an excellent fortnight, climbing, skiing, walking and upsetting the local wildlife, which included a lot of rather stormy Elephant Seals. The only bit of excitement occurred when Marine Mark Humphry fell down a crevasse on the Lyell Glacier, fortunately he was attached to the Druid, who nearly followed him. This event was met by the Detachment war cry of 'get your cameras out lads' and it was only after a suitable number of photographs had been taken that any effort was made to recover an even more noisy than usual Mark Humphry.



The Men

From South Georgia it was back to Stanley for Christmas. It was at this time that the famous Taff Kervin 'Mindwarper' cocktail was invented. It consists of equal parts of Gin, Rum, Vodka, Brandy, and Whisky in a pint glass, topped up with Martini and just a dash of Angostura bitters for taste. Needless to say after a week of that we were ready for another drying out period and this was en route to MAR DEL PLATA for our mid term break. The main attraction in M-D-P were the large numbers of Latin American Ladies in bikinis on a beach only a few minutes walk from the ship. The rest of the trip is bound to work out along similar lines but I'm sure we will all make Portsmouth.



Light Jackstay off Portland

THE SEAMEN DEPARTMENT

This Season we were 2 men down to start with. One of our crew had been hospitalised and was never relieved and an accident on the forecastle, the day before we deployed, claimed the second. The injury was a fractured wrist, however, after a period in RNH Haslar, he is now happy in HMS VERNON, we'll all remember AB Skellern.

The forecastle had been the scene of further excitement a week or so previous, while swinging the compass, the strain on our wire securing us to a buoy proved too great, the result being the buoy and the ship parted company and we found ourselves drifting towards Fareham Creek. One anchor was let go, stopping our drift and we were soon in the capable hands of the tug. That was not the end of the days funnies, on weighing the anchor it was found to be fouled around the ground tackle of the mooring buoy. After much discussion and looking at watches it was decided to break our cable. On completion of what was called sea trials our anchor and cable was duly returned to us, compliments of the Port Auxiliary Services.

We have done several seamanship evolutions, particularly during our spell at Portland when we were the guests of FOST staff. Our main claim to fame was a light jackstay. This went very well indeed as this was probably one of the few times the ship had ever had to carry one out. After much preparation, thought and talk, we had our jackstay all laid out ready, all we needed was a ship to play with us. We had the requisite number of men, many a little vague as to their task, the Deck gang were there in full force, the Buffer passed a professional eye over everything, all correct, no last minute changes needed. The FOST staff were there making notes and asking all the sort of questions that only they can ask. At last a ship appears dangerously close to us and the whistle goes, everybody down, BANG, and the gun line has been passed. All the seemingly useless bits of rope take on a meaning and the Deck Gang come into their own; with 'Paddy' Burgess and 'Jock' Rossiter on the High Point, 'Mick' Kennard on the Inhaul, the Buffer calling out the numbers on the jackstay, and 'Clubs' acting as general interpreter to the ship's members who must have failed Part One Training because they could not understand our simple seamanship terminology. A baton wave from the Dutch Frigate we are jackstaying with says our Patt 1914 is on and ready to pass the test weight. More of the Gang appear, there's 'Annie' Oakley backed up by the Heavies, Jim Foster, 'Tanky' Tankred and big 'Jan' Rowe grunting merrily. The 3 sinkers used as test weights are man-handled into position (FOST Staff please note) and hooked on, a roar from No 1 on the Paint (Boat Deck), echoed by the Buffer, interpreted by Clubs and away into the air they go. Things are really happening now, out go the weights, back to us, next the turn of 3 of the Staff. The weights are changed for the Helo Strop (thank you Air Department and up steps the first of the staff, another roar from above, up and away goes the first, oops he nearly smashes his leg on our bulwarks, but he is fitted with 2 anyway. The Dutchman has increased her distance (chicken) but we get all 3 Staff safely across and back again, we had one slight snag in the middle when one of our signals was not understood (well they will keep changing them) but the Staff soon made everything crystal clear to us and I think we did very well.

The same day as our jackstay we prepared the ship to 'tow' one of the RFA's. Being ENDURANCE the 'tow' is somewhat different to our Grey Brothers, eventually with the aid of some wonderful little drawings in Ships Standing Orders, the 'tow' was made ready. This had involved rounding up the rest of the Gang and also a few Royal Marines to provide the sound effects. FOST Staff once again moved in and with a great deal of consulting of watches they decided that we need only pass the messenger. This rather took the wind out of our sails because the recovery of the 'tow' was to have involved the whole of the ship's company, most of whom were beginning to enjoy the cruise already.

There have been problems with the seaboard falls (Cost Consciousness taken to the ridiculous by giving us 30 feet of wire too little), a fouled anchor at Montevideo and a parted stern rope at Mar Del Plata, these were all dealt with by the Gang taking it all in their stride, well at least it was a change from chipping, scrubbing and painting. We have had some boring times, and some hectic times this season, to those who are-leaving let's hope they have the drafts they want, and to those who stay, let's hope the Gang is still a good one next season.

THE HYDROGRAPHIC DEPARTMENT

A BRIEF HISTORY OF THE BRANCH

When the compass was applied to nautical use in the 12th Century, the need for special types of maps for nautical use became essential. Nothing has been of more importance to the foundation and expansion of sea borne trade than the production of the charts which represent the results of Hydrographic Surveyors' work (HYDROGRAPHY - from the 2 Greek words, HYDRO meaning water, and GRAPHOS meaning drawing).

Charts were drawn in Italy in the 14th Century but it was not until the end of the 15th Century that charts were first printed and, by 1560, being engraved on copper. The Dutch were publishing charts under Government authority by the middle of the 17th Century and the French followed suit in 1720.

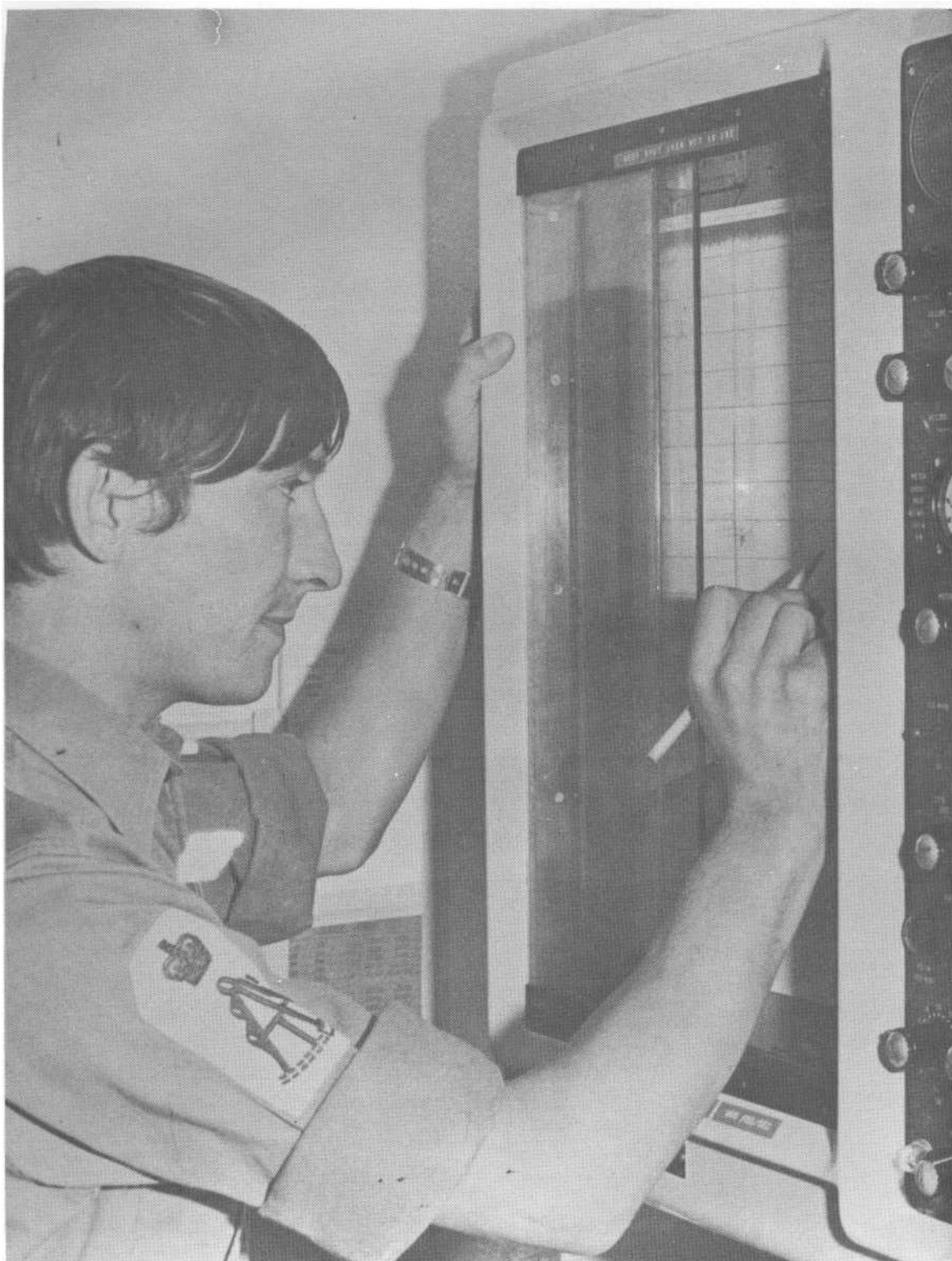
Due to the exploratory voyages of COOK, VANCOUVER, DAMPIER, DALRYMPLE, and many others, a wealth of hydrographic information was rapidly accumulating at the Admiralty. Material and information grew to such an extent that in 1735 the Hydrographic Department was founded to 'Take charge and custody of such plans and charts'. On 12th August, 1795, Alexander DALRYMPLE was established as the first Hydrographer, the only civilian to hold this post. He had a staff of 5 and was allowed £650 per annum to run the department. Their work was to catalogue all the charts held by the Admiralty - about 20,000 of them.

DALRYMPLE was asked to retire in 1807 and his place was taken by Captain HURD, a Surveying Officer returned from the West Indies. HURD founded the Surveying Service, but in 1822 he disappeared and was never seen again.

Survey Recorders did not come on the scene until 1904 when the idea was first proposed and it was finally accepted 3 years later in 1907.

The introduction of the echo-sounder in the 1920s made life a lot easier for the surveyor as previously the only methods of sounding used were the Lucas Sounding Machine and the ever present and still much used hand leadline.

The first ship to be actually laid down as a survey ship was HMS VIDAL, built at Chatham in 1951. She was the first ship to use Cafeteria messing and the first survey ship to carry a helicopter. The HECLA Class Ocean Survey Ships were built in 1965/66 to fulfil a dual role, capable of both oceanographic and hydrographic work anywhere in the world from the tropics to ice-strewn waters. They are fitted with both wet and dry laboratories and are capable of taking and analysing samples of sea water from a number of different depths simultaneously. Their work also includes taking cores and samples of the sea-bed, underwater photography, seismic operations, meteorological programmes and a variety of other tasks. All this, together with the fully automated data logging and chart drawing systems, satellite navigator, and various electronic fixing aids now available, ensure that the modern Hydrographic Surveyor is better able to cope with the ever growing demand for better and more accurate charts knowledge of the oceans around us.



Jonah on the depth recorder

THE SHIP'S HYDROGRAPHIC DEPARTMENT

Within a day of leaving Portsmouth, we were at work data gathering. Once we had left the Continental Shelf of the South West Approaches, we started passage sounding. All the time we are on passage, we keep a continuous record of our track and the depths obtained. It is by this means that the underwater topography of the oceans is slowly discovered and charted: passage sounding is carried out by many different ships from Ocean Survey Ships to passenger liners. ENDURANCE is equipped with 2 pieces of equipment that assist us in rendering accurate results. The first is the echosounder; during the refit in 1973, we became the first ship to be fitted with the new Kelvin Hughes Type 778 General Service Depth Recorder with its surveying attachment, the Precision Depth Recorder. This enables us to measure the depth, however deep the water, to high degree of accuracy in either fathoms or metres. The second thing that has revolutionised surveying and navigation at sea is the Satellite Navigator System. Originally designed for the Polaris Submarines, this system has been at sea in its commercial form for about a decade. It gives us a position to a far greater degree of accuracy than the traditional starsights (in the region of 4 times the accuracy and it produces many more fixes each day than would otherwise be obtained by sights. As a result, we are in an excellent position to prove or disprove the existence and depths of shoals, seamounts etc.

During the ship's visits to Dakar, Salvador de Bahia and Montevideo, opportunity was taken to calibrate our surveying instruments and tide gauges. The JAMES CAIRD's echo sounder was proving most troublesome and causing a number of headaches for both the survey and electrical departments. Despite all the technical know-how, the electricians were unable to make it work and it was not until the boat was accidentally grounded in South Georgia that it suddenly started to work!

Before any survey party can go into the field to gather data, there has to be much chartroom work mainly consisting of planning, computations and drawing; the long passage south enabled us to complete the preliminary work for all this season's surveys so that by the time we reached Stanley, we were ready and itching to move out into the field.

After checking the Stanley Automatic Tide Gauge, upon which all our Falkland Islands tidal data depends, we took some shore magnetic observations. With 3 different instruments, we measure the Earth's total magnetic force or Intensity and the Vertical and Horizontal Components thereof. This is particularly valuable work as there are few magnetic observatories down south and our observations all help to build up the overall picture of the Earth's Magnetic Field. We also carried out magnetic observations ashore in South Georgia and in the Antarctic. These results are forwarded to Edinburgh University and the International Geophysical Centre in Paris.



Ashore in Cooper Bay



BAS geologists in Cooper Bay

On leaving Stanley for South Georgia, we streamed the towed magnetometer. This also measures the Earth's total magnetic intensity and it is towed 750 feet astern of the ship to avoid any interference from the ship's own magnetic field. The results from these observations are used by geologists and geophysicists to assist in determining the age and make up of the rocks and Earth's crust beneath the sea. These observations we send to Birmingham University who are studying the geology of the Scotia Arc and Antarctic Regions.

Our first major work period was whilst the ship was in South Georgian waters. A number of different tasks were planned including ship and boat sounding, aerial photography, helicopter support for the British Antarctic Survey (BAS) FIELD teams, and the combined RN/BAS Diving project. After an initial visit to King Edward Cove, during which we embarked the various BAS teams which included 5 divers, 4 geologists and 1 botanist, we steamed down to the south-eastern end of the island which was to be our main operating area. COOPER BAY was to be put under close scrutiny from below, on and above the sea surface. The main task was the joint diving project - probably the first time we have carried out a combined diving programme with BAS with all its inherent problems like differing equipment, techniques, and procedures. The aim of the project was to carry out an underwater diver sampling programme at regular intervals between the shore line and the 20 metre contour. It was also hoped to carry out a grab sampling programme from the boat to compare the results obtained by each method. The results from this project, organised by the BAS Biological Experimental Station in Huntingdon, will be evaluated by the biologists in South Georgia during their forthcoming winter. Bad weather throughout the period hindered diving operations but we managed to complete the sampling despite the fact the boat had to spend the night inshore on 2 occasions - the first time with 8 people on board.

Taking place concurrently was the establishment of ground control and survey marks ashore around Cooper Bay area. This was needed both for the aerial photography and for the boat survey of Cooper Bay. A Tidal party was also established ashore under canvas to monitor the tidal movements. Owing to much bad weather, most of the surveying programmes were curtailed and we had to be content with obtaining lines of soundings offshore in the approaches to South Georgia. We managed to complete much of the aerial photographic programme in the lulls of the weather. As well as vertical photography both for the Hydrographic Office for charting the coastline and for BAS geologists to help identify rock formations, a number of oblique shots of the snouts (ends) of glaciers were taken to enable the Glaciological Section of BAS in Cambridge to determine the movement and composition of the glaciers in South Georgia.

At the end of this period we returned to Grytviken for a weekend during which we established an Automatic Tide Gauge at King Edward Point to obtain a year's tidal readings. After leaving Grytviken, we landed a party of 2 surveyors and 2 ornithologists at Bird Island at the eastern end of South Georgia. The surveyors were baulked in their attempts to re-occupy an old magnetic station by an estimated 10,000 Fur Seals in the cove and had to establish a new one away from the seals' breeding ground. The ornithologists took the opportunity to look round the largest breeding colony of Wandering Albatrosses in the world.

Two days later the first known landings on Shag Rocks, 150 miles to the west of South Georgia, were effected by helicopter and good geological samples were obtained from 2 different islands.

After a brief fuelling stop in Stanley, we headed for the second major work period in the north-west Falklands. The area to be surveyed was the large expanse of water lying between the JASON ISLAND, WESTPOINT ISLAND AND SAUNDERS ISLAND, which is increasingly being used by the cruise liners that visit the islands in that area which abound in a great variety of wild life. Whilst the ship surveyed the offshore areas fixing herself by horizontal sextant angles - the old traditional method - the inshore waters and shoals were sounded by the JAMES CAIRD. A camp party of 8 was established under canvas at Westpoint Settlement and they stayed ashore for a month. The ship succeeded in her main task of proving and sounding a passage from the open sea in the north through the shoals to the anchorages off Carcass and Westpoint Islands. The boat party despite some bad weather, achieved much useful work in completing Hope Harbour and the areas around Carcass Islands, the Needles, Low and Dunbar Islands, filling in all the shoals gaps left by the ship. After 12 days work, ENDURANCE sailed for Stanley for Christmas before heading north for MAR DEL PLATA. The camp party continued to progress the survey as fast as possible but was hindered from time to time by mechanical troubles and inclement weather. Everyone had developed a liking for the unlimited fresh mutton and beef which was generously given to us by the owners. We were also able to closely study the habits of the Magellanic, or 'Jackass', penguin as our camp was pitched in the middle of a large rookery of theirs - indeed, one of our tents was above one of their burrows and, apart from keeping the tent occupier awake at night, the resident penguin was always in danger of ending up in the same bed: On other days when bad weather prevented boat work, opportunity was taken to visit other 'Gentoo' and 'Rockhopper' Penguin rookeries and the lovely Black-Browed Albatross' nesting grounds as well as helping in the rounding up of sheep during the lambing sessions.

On 9 Jan, the ship and boat were reunited and after a brief fuelling stop in Stanley, we continued our journey south towards Antarctica. Our first sighting was of Elephant Island where Shackleton's party from ENDURANCE under Frank Wild had survived for 3 months whilst Shackleton sailed to South Georgia for help. The next day, another 8 man camp party was landed at Harmony Cove on Nelson Island in the South Shetlands. After the usual help from the helicopters in carrying out a preliminary reconnaissance, putting up all the required marks and landing the camp equipment, the ship left us to progress the survey whilst she steamed on south.



Inside the volcano at Deception Island

Leaving Harmony Cove, the ship sailed across the Bransfield Strait for the Weddell Sea. After investigating weather conditions in the Weddell Sea and the Antarctic Sound where freezing sea spray was fast making us look like one of the many icebergs around us, we turned back into the Straits and headed south down the west coast of the Grahamland Peninsular. The weather quickly improved and with the sun shining from a clear blue sky we passed through the Gerlache Straits where more aerial photography was taken for reconnaissance purposes both for possible anchorages and future expedition camp sights. After passing through the beautiful Neumayer Channel we anchored off Palmer Station, the American Base at Arthur's Harbour on Anvers Island. The following day, we transitted through the exquisite Lemaire Channel before anchoring off the BAS Base at the Argentine Islands where we transferred our magnetometers for use by their geophysicists during winter. Leaving there, we once again headed south until we crossed the Antarctic Circle at 9 minutes past 5 on the morning of Friday 17 Jan, after which we reversed course and headed north for Deception Island in the South Shetlands. This island, a live volcano which erupted in 1969, provides an excellent sheltered anchorage; we anchored off the deserted and derelict BAS Base in Whalers Bay whilst we compared our position obtained by the Satellite Navigator with that obtained by the old traditional method of star sights ashore some 20 years earlier. Leaving Deception, we headed east towards Nelson Strait which we were to survey at the same time as flying 4 geologists around some of the remoter islands in the South Shetlands to obtain rock samples.

Meanwhile, ashore at Nelson Island, the first week saw us with some beautiful weather making the Antarctic seem (as it always does under these conditions) exquisitely beautiful and most appealing. We were, however, experiencing some technical problems trying to lay down our ground control and survey marks, which delayed the start of boat sounding by several days. Once started we made excellent progress soon proving that the existing chart's coastline is badly wrong, until the weather prevented further work. By Monday of the second week the wind began to rise and it was blowing a gale the following morning showing us the other side of Antarctic weather. The wind continued to rise as a series of depressions passed up Drake's Passage giving us mainly easterly winds. Far from being sheltered from this direction as we had been led to believe, we were being affected by one of the many local Antarctic phenomena where the wind blowing over Nelson Island, low and aerofoil in shape, gathered speed rapidly which resulted in much stronger winds in Harmony Cove and Nelson Strait than the surrounding waters. By Thursday we were experiencing steady 80 knot winds with gusts up to 100 knots; early on Thursday morning, JAMES CAIRD broke adrift from her heavy weather moorings and was immediately grounded on the beach amongst brash ice under the towering ice cliffs. The strength of the wind caused the ice to pound her and by the next morning she was a tragic wreck. Our main living tent had also finally been demolished after a long battle to keep it up and we just managed to keep the other one standing. Fortunately, by Friday, the wind had abated to a mere 20-25 knots and on Saturday the ship was able to recover us - slightly battered but all in excellent shape. It had been a most enjoyable and instructive fortnight seeing both the best and the worst of Antarctic weather.

This was in effect the end of the surveying season and all that was left for us to do was to continue passage sounding on the way home.