Operation Deep Freeze 61

9 ships, 30 aircraft and 3,000 men took part in DF 61, under the operational command of Rear Admiral David M. Tyree. South Pole, Byrd, Hallett and McMurdo Stations were the main US bases of operation this season. At Byrd Station, construction of a new undersnow camp began, to contain 15 buildings, laboratories and housing for 40 men. At McMurdo Station, site preparation began for installation of a nuclear power plant the following season.



U.S. NAVY 17038 DEC 10 1960; signed by Rear Admiral David M. Tyree

U.S. Fleet

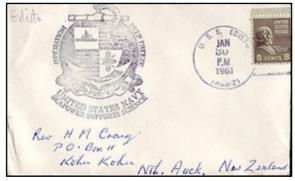
USS Arneb, USS Edisto, USS Glacier, USS Staten Island, USCGC Eastwind, USNS Alatna, USNS Greenville Victory and USNS Pvt John R Towle comprised the fleet this season.



USS ARNEB FEB 24 1961



cachet USNS Alatna



USS EDISTO JAN 30 1961



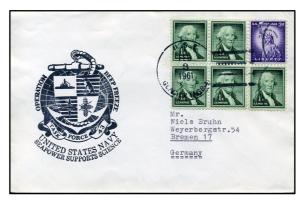
USS STATEN ISLAND FEB 23 1961



cachet USNS Greenville Victory



USCG CUTTER EASTWIND 11 FEB 1961



USS GLACIER FEB 3 1961



cachet USNS Pvt John R Towle



cachet USNS Pvt Frank J Petrarca

Also, USNS Pvt Frank J Petrarca visited Lyttelton on 20 October 1960.

Picket Ship USS Wilhoite

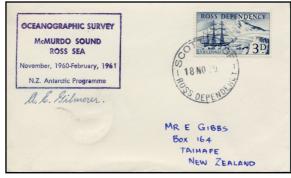
See Jurisich, M. *Operation Deep Freeze Picket Ships*. Classic Stamps Ltd., Blenheim, New Zealand 2018. @ www.classicstamps.co.nz

N.Z. Fleet HMNZS *Endeavour*

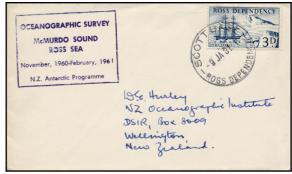
Vessel was under command of Commander R.H.L. Humby from 27 December 1960 until 22 February 1961. This was Endeavour's fifth and final voyage to Antarctica.

1st duty - vessel departed Wellington 27 December and arrived at Lyttelton the following morning to load personnel and stores etc., some for Campbell Island. Vessel berthed at Campbell Island on 1 January and offloaded 10 tons of stores and 7 scientists of the 1960-61 Campbell Island Expedition team. Vessel departed later that day for the first oceanographic station at 63°S 174°E. Three cachets were used for this season's New Zealand Oceanographic Institute expeditions aboard HMNZS *Endeavour*. A.E. Gilmour went to McMurdo Sound early in the season to carry out work on tidal flow under the ice; he took with him the November 1960-February 1961 cachet.

New Zealand Oceanographic Institute members were A.E, Gilmour (leader) and S.C. Watts; G.A. Harlen, C. Devine, D. Farmer, M. Gregory and A. Hanley were all from the Geophysics Division DSIR.



SCOTT BASE ROSS DEPENDENCY 18 NO 60.1 signed by A.E, Gilmour (leader)



SCOTT BASE ROSS DEPENDENCY -9 JA 61.1

2nd duty - the second New Zealand Oceanographic Institute group sailed with HMNZS *Endeavour* from Wellington on 27 December 1960. New Zealand Oceanographic Institute members on board were G.A. Harlen, plus C.E. Devine, D.W. Farmer and M.R. Gregory from the DSIR Antarctic Division. They carried with them the December 1960-February 1961 Expedition cachet. A.E. Gilmour (expedition leader) and S.C. Watts joined the ship at McMurdo.



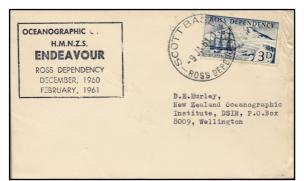
CAMPBELL ISLAND –3 JA 61.1 signed by E.J. Godley, F.J. Fisher, P.M. Johns, P.R. Wilson, N.T. Moar, J. Moreland and D. Orwin



CAMPBELL ISLAND -3 JA 61.1

HMNZS *Endeavour* first called into Campbell Island on 1 January 1961 to drop off the relieving weather station team. Also, on board were E.J. Godley, F.J. Fisher, P.M. Johns, P.R. Wilson, N.T. Moar, J. Moreland and D. Orwin. The three botanists were concerned mainly with the mapping of vegetation types on the island and also collecting and preserving plants.

The two marine biologists (one from Canterbury University) were concerned with collecting specimens from fresh and salt water, and also studying intertidal relationships in the harbours and on the open coast. The remaining two members, a wool biologist from Massey University, and P.R. Wilson, from Animal Ecology Division, DSIR (a student at the Victoria University of Wellington) attempted to census the feral sheep population.



SCOTT BASE ROSS DEPENDENCY –9 JA 61.1



SCOTT BASE ROSS DEPENDENCY –9 JA.61.1 signed G.A. Harlen, C.E. Devine & M.R. Gregory

This group returned to Port Chalmers on 1 February per USS *Wilhoite*. On 2 January, the New Zealand Oceanographic Institute group continued with observations aboard HMNZS *Endeavour* as they headed towards McMurdo Sound. The expedition cachet was applied on 7 January to several covers in anticipation of members' arrival at McMurdo.

HMNZS *Endeavour* berthed alongside USNS *Pvte John R Towle*, USNS *Alatna* and USCGC *Eastwind* on 9 January 1961. Mail was cancelled that day at Scott Base. The New Zealand Oceanographic Institute cachet appears in green as well as black ink.



SCOTT BASE ROSS DEPENDENCY 11 JA 61.1 signed by Lt. Cdr. Humby and Lt. M.N. Waymouth



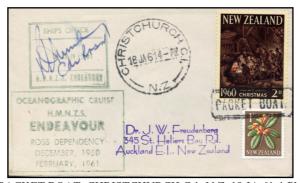
SCOTT BASE ROSS DEPENDENCY 11 JA 61.1 signed by Lt. Cdr. Humby

The HMNZS *Endeavour* cachet appears on a USNS *Alatna* cover later cancelled at McMurdo on 2 March 1961. The cachet may have been placed when the two ships were alongside on 9 January.



U.S. NAVY 17038 2 MAR 1961

3rd duty - vessel dropped off members of the New Zealand Summer Party at Scott Base then departed on 15 January 1961 for the next phase of oceanographic observations.



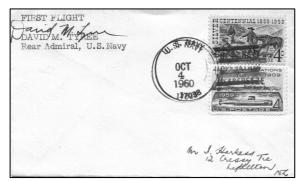
PACKET BOAT; CHRISTCHURCH C.1. N.Z. 18 JA 61 4-PM signed by Lt.Cdr. R.H. Humby, RNZN

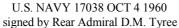
Most of the New Zealand Oceanographic Institute members returned aboard HMNZS *Endeavour* which arrived in Wellington on 22 February 1961.

At the end of DF 61, HMNZS *Endeavour* returned to Auckland on 2 March 1961 for a partial refit; she was then sold on 7 November to a Nova Scotia company for sealing. Renamed the *Arctic Endeavour*, she put in several years of good service before sinking off Catalina, Newfoundland in 1982. She was raised and scrapped in May 1983.

U.S. Flights

The first R7V-1 Super Constellation flight left Christchurch, under command of Lieutenant Commander D.L. Reckling, on 3 October 1960, arriving at McMurdo on 4 October, with Rear Admiral Tyree on board.

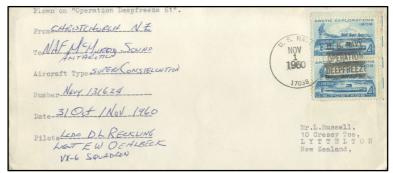






backstamped LYTTELTON N.Z. -7 OC 60.1 signed by Lt.Cdr. D.L. Reckling

Several hours later the first of the seven C-124 Globemasters arrived, followed by a VX-6 Squadron P2V-7 Neptune aircraft. The two larger aircraft returned to Christchurch with mail and cargo; weather conditions then deteriorated, and further inbound flights were delayed until 9 October.



U.S. NAVY 17038 NOV 1 1960; backstamped LYTTELTON -4 NO 60.1 R7V-1 Super Constellation flight Christchurch-McMurdo 31 October



U.S. NAVY 17046 NOV 23 1960; backstamped CHRISTCHURCH 24 NO 1960 C-124 Globemaster flight McMurdo - Christchurch 13 November

Project Magnet

During DF 61, as part of Project Magnet, the US Navy Hydrographic Dept conducted an aerial survey of the world's magnetic field over Antarctica. Begun in 1958, the project used aircraft equipped with magnetic and cosmic-ray recorders plus automatic navigational equipment. The Antarctic section of the program was initially carried out in November 1960 using a WV-2 Warning Star aircraft. On 1 November, the WV-2 aircraft crashed at Williams Field; eight men were injured and subsequently flown to Christchurch hospital. Equipment was salvaged, but the aircraft was a total loss. The aircraft was completing the fourth of a series of flights that would have covered the bottom of the world:

- Christchurch, via Macquarie Island, to McMurdo
- McMurdo, via the Magnetic Pole, to Hobart
- Christchurch, via 63°S 160°W to McMurdo it was on this flight that the aircraft crashed
- McMurdo, via the Geomagnetic Pole area, to Perth
- Christchurch, via 65°S, 175°W, to McMurdo
- McMurdo, via South Pole to Punta Arenas, Chile.

The Hydrographic Office had to defer the survey until additional aircraft were available.

Royal New Zealand Air Force Antarctic Flight

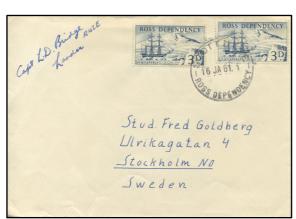
DF 61 was principally a clean-up operation for the RNZAF Antarctic Flight. At the end of the Commonwealth Trans-Antarctic Expedition, the US Navy had purchased the Otter aircraft and left it in storage at Scott Base. It was purchased by the New Zealand Government and transported to Wigram Airport for repair during DF 60 and brought into service in Antarctica for DF 61. The other RNZAF Antarctic Flight aircraft, the Auster, was dismantled and shipped back to New Zealand at the end of the season. The flight crew comprised Flight Lieutenant P.S. Rule, Flight Sergeant L.W. Tarr, Sergeant R. Fergusson, Corporal A.B. Boag, and Lance Corporal G.A. Hodson. They went south aboard HMNZS *Endeavour*.



SCOTT BASE ROSS DEPENDENCY 17 FE 61.1

Scott Base Summer Party

Captain L.D. Bridge (O.I.C.), L.O. Duff, B.A. Foley, V.E. Donnelly, U.J. Sobiecki, P.C. Graham, M.M. Gill (D.S.I.R. Geophysics Division), R.S. Cranfield, W.H. Deverall, R.W. Tripp, W.R. Logie, K.L. Fairclough, C.A. Clements, A.R. Scott, J.G. Murray and R. Shanahan.



SCOTT BASE ROSS DEPENDENCY 16 JA 61.1 signed by Captain L.D. Bridge (O.I.C.)



SCOTT BASE ROSS DEPENDENCY 10 AP 61.1 sent by V.E. Donnelly (O.I.C.)

Captain. Bridge and L.O. Duff returned to New Zealand in February 1961; Donnelly took over as O.I.C. and W.R. Hare later replaced L.O. Duff.

Hallett Station

See Jurisich, M. A Postal History of the Joint New Zealand-United States Hallett Station, Antarctica. Classic Stamps Ltd., Blenheim, New Zealand 2018. @ www.classicstamps.co.nz

NZARP Field Program

New Zeasland Geological and Survey Antarctic Expedition

The US 9th Troop Carrier Squadron flew the team into Williams Field on 2 November 1960; mail was first cancelled at Scott Base from 3 November.



CHRISTCHURCH AIRPORT -3 NO 60.1

SCOTT BASE ROSS DEPENDENCY -8 NO 60.1 signed by C.N. Cooper

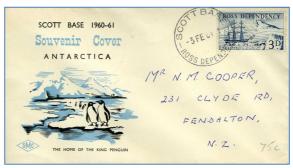
Expedition members were divided into two teams on arrival: the **Northern Party** of G.J. Matterson, D.N. Skinner, D.R. Goldschmidt and P. Otway; and the **Southern Party** comprised Captain P.J. Hunt, C.N. Cooper, M.G. Laird and W.H. Herbert.

The Northern Party was flown by R4D aircraft on 10 November to the ice movement station at 80°S, 167°E, on the Ross Ice Shelf, and then sledged to the mouth of Barne Inlet. On 19 November Matterson reported that they had sledged to the slopes of Cape Selborne. They then moved west and south. After crossing a saddle over the main range, they were camped by 9 December 10km from the coast. The party was about 240 miles SW of Scott Base and 120km from the southern party.

By 14 December Matterson's party had pushed south another 24km and were camped 15km east of Mt. Field. On 22 December, the party was supplied by an Otter aircraft when camped 35km south of Byrd Glacier. On 29 December, a successful airdrop was made to the party at Cape Parr. They then sledged northwards and by 20 January the two field parties were only 60km apart in the Cape Douglas-Cape Parr area. The party was returned to Scott Base by two flights on 6 and 7 February.



SCOTT BASE ROSS DEPENDENCY 29 NO 60.1 signed by Southern Party members

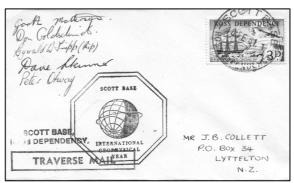


SCOTT BASE ROSS DEPENDENCY -3 FE 61.1 signed by Northern Party members

The Southern Party was flown south from McMurdo in a Dakota aircraft on 30 November to the north bank of the Nimrod Glacier at 82°S162'E. On 3 December, a preliminary sledge-journey was made eastward and the party camped at the foot of the coastal range, spending two days in survey work and a geological examination of the rock ridges of the Cape Wilson hills. They then turned west until halted by the Nimrod Glacier ice field. On 13 December, they started the uphill journey northwards. On the evening of the following day they camped 21km north of the Nimrod Glacier at 82°11' S, 160° 25' E. Having failed to find a route through the main range, the party then turned eastwards.

On 29 December, a Dakota aircraft got through for resupply. A survey station at 3,700ft was occupied on 2 January, and next day the party sledged into the upper reaches of Beaumont Bay.

Bad weather prevented observations until 9 January. By the following afternoon, the party was camped further to the west on the east bank of a new glacier at 81° 33'S, 160°10'E. More snow fell, and it was not until 17 January that they were able to turn south to sledge in the deep soft snow to the western side, below an ice field emanating from the foothills of Mt. Nares where the resupply aircraft arrived on 24 January. They reached their last survey station on the evening of 3 February. A blizzard resulted in the sledges and tents having to be dug out twice. Early on 9 February the team was picked up by Dakota aircraft and returned to Scott Base.



SCOTT BASE ROSS DEPENDENCY 10 FE 61.1

Other covers, variously signed, all with boxed cachet TRAVERSE MAIL in addition to the regular expedition cachet, were cancelled at Scott Base on 10 February 1961.

Victoria University of Wellington Antarctic Expedition No.4

R.H. Wheeler, I.H. Willis, C. Bull and R. Cooper comprised the team this season. Geologist H.R. Blank from the United States, studying in New Zealand at the time, also joined them. The group flew from Christchurch on 15 November 1960 to continue their research projects.



SCOTT BASE ROSS DEPENDENCY 24 NO 60.1 signed by C. Bull (signed on reverse R.W. Balham together with the 1959-60 VUWAE cachet)



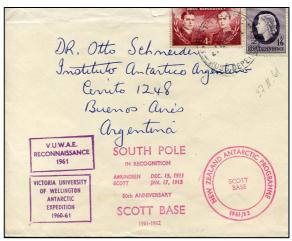
SCOTT BASE ROSS DEPENDENCY 3 FE 61.1 signed by R.H. Wheeler, I.H. Willis, C. Bull and R. Cooper



R. Cooper, I. Willis, R. Wheeler and H.R. Blank

The sphere of operations for the DF 61 summer was the partly ice-free area between the Blue Glacier, which terminates on the Victoria Land coast almost due west of the Hut Point Peninsula, Ross Island, and the head of the Koettlitz Glacier. This area lies to the northwest of the Koettlitz itself. In the region are numerous small valleys. Geologically, the area consists mainly of basement, igneous and metamorphic rocks on which there are a few recent volcanic craters, flows, etc.

The VUWAE cachet appears on a USNS *Greenville Victory* cover cancelled at Scott Base on 30 January 1961. R. Wheeler's signature is on a USNS *Alatna* cover cancelled at Lyttelton on 20 February. The cachet is also on a cover cancelled at Wellington on 27 February and later a USNS *Alatna* cover cancelled at McMurdo on 2 March 1961.



SCOTT BASE ROSS DEPENDENCY 27 MR 61.1

Canterbury University Biology Department - Adelie Penguin Studies, Cape Adare

Canterbury University's B.E. Reid and C. Bailey spent three weeks in January at Cape Adare to undertake a further study of the habits of Adelie penguins. They were flown in by helicopter from USCGC *Eastwind*. The two men made counts of the penguins in various colonies.

Historic Huts Restoration Project

See Jurisich, M. *Historic Huts Restoration Project*. Classic Stamps Ltd., Blenheim, New Zealand, 2018. @ www.classicstamps.co.nz

Visitors

Lord Keith Shackleton and Captain R.F. Scott's son Peter Scott visited the historic huts; their signatures appear on covers cancelled 3 February 1961.





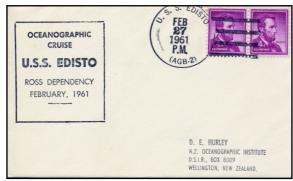


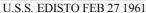
SCOTT BASE ROSS DEPENDENCY -3 FE 61.1

Oceanographic Surveys

USS Edisto

On 12 February 1961, New Zealand Oceanographic Institute scientists A.E. Gilmour and G.A. Harlen transferred from HMNZS *Endeavour* to USS *Edisto* for further oceanographic research. Gilmour and Harlen used the third New Zealand Oceanographic Institute cachet for this final voyage for the season.



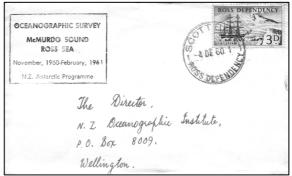




U.S.S. EDISTO FEB 27 1961 signed by A.E. Gilmour

USS Staten Island

The New Zealand Oceanographic Institute provided an observer aboard USS *Staten Island* for this November 1960-February 1961 McMurdo Sound-Ross Sea Survey. Other US covers from the cruise also exist with circular Oceanographic Group Deep Freeze 60 USARP cachet overlaid with single line cachets Deep Freeze 61 and Ross Sea Group.



SCOTT BASE ROSS DEPENDENCY 4 DE 60.1

United States VX-6 Hercules Mercy Mission to Byrd Station April.

In late March 1961 word was received that a Russian (exchange) scientist, Leonid Kuperov, at Byrd Station, was suffering from a bleeding ulcer, which led the US Navy to launch a mercy flight that was to become an historic first, by piercing the Antarctic winter darkness. From 19 March 1961, his condition worsened and on 31 March the conclusion was reached that his condition was becoming chronic with the possibility of further complications. On 1 April, Rear Admiral Tyree ordered VXE-6 C-130 #148312, under command of Lieutenant Commander. L. Newcomer, to conduct a mercy flight, departing Quonset Rhode Island on a 26,500 mile, 69-hour flight.

It was to be the first Winter flight to Antarctica undertaken by VXE-6. Aboard were 16 personnel, including a spare crew, a linguist and medical officers. A second C-130, under the command of Lieutenant R.F. Carlson, accompanied them as far as Christchurch and was on standby as a search and rescue aircraft as the mercy flight was conducted. They reached Christchurch on 4 April, but bad weather delayed the mercy mission for four days. The weather in Christchurch gave the flight planners concern, delaying the mercy mission three times before departing at 12:50hrs on 8 April. While on the mission, the crew had no navigational aids, no en-route weather forecasts. They flew by grid navigation and celestial shots with a sextant. Special pre-flighting was conducted at McMurdo prior to the critical 917-mile leg to Byrd station. They had a five-hour window of murky twilight at Byrd Station and timed the flight accordingly. The C-130 remained at Byrd only long enough to pick up Kuperov. On return to McMurdo, they took on equipment that needed to be backhauled to Christchurch, 45,000lbs of fuel and 8 JATO bottles to assist the take-off.

Initial attempts to take off failed until they repeatedly taxied the aircraft over about a mile of snow to compact the snow, to create a ski runway. This done, another take-off was attempted and the giant plane broke free after traversing about 4,000 feet and lifted for the return flight to New Zealand, arriving at 12:51hrs on 11 April where they were met by Rear Admiral Tyree. This flight proved the feasibility of such Antarctic winter flights and demonstrated the ability of VXE-6 to operate in the darkness, so

Antarctica no longer needed to be isolated seven months of the year.





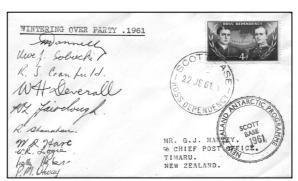
U.S.S. STATEN ISLAND MAR 30 1961

In support of this historic flight, the icebreaker USS *Staten Island* made a dash from Lyttelton on 31 March, arriving at their ocean station at 60° south at 0700 on 5 April.

Scott Base Wintering Over Party

Lieutenant L.D. Bridge had originally planned to be leader, but he returned to New Zealand for private reasons before winter and V.E. Donnelly took over. Other members were Sergeant L.O. Duff, B.A. Foley, U.J. Sobiecki, R. Shanahan, P.M. Otway, W.W. Herbert, R.S. Cranfield, W.H. Deverall, K.L. Fairclough, W.R. Logie, Corporal P.C. Graham and C.A. Clements.

Mid-winter's Day



SCOTT BASE ROSS DEPENDENCY 22 JE 61.1