SCHEDULE 1

Regulation 2(4)

"SCHEDULE 1

Regulation 14

Restricted Areas

Antarctic Specially Protected Area No. 101

Taylor Rookery, Mac.Robertson Land

Lat: 67°27'S; Long: 60°53'E

The Taylor Rookery ASPA consists of the whole of the northernmost rock exposure on the east side of Taylor Glacier, Mac.Robertson Land (67°27′14″S, 60°53′0″E). The Area boundary follows the coastline (at the low tide mark) from a point at the north-western corner of the Area at 67°27′4.9"S, 60°52′58.2"E (boundary point 1), in a roughly south-easterly direction to boundary point 6 (67°27′27.8″S, 60°53′7.7″E). The boundary then continues in a westerly and then northerly direction (roughly following the limit of the ice free area) to boundary point 22 (67°27′18″S, 60°52′50.2″E) then follows the ice cliff north to boundary point 23 (67°27′5.3″S, 60°52′57.1″E) and then joins back to boundary point 1. There are no boundary markers delimiting the site.

The emperor penguin colony is located on a low lying rock outcrop in the south-west corner of a bay formed by Taylor Glacier to the west, the polar ice cap to the south and the islands of the Colbeck Archipelago to the east. The Area is surrounded by fast ice to the north and east. The Area is some 90 kilometres west of Mawson station. There is ice-free terrain adjacent to the glacier on the western boundary and to the south the rock rises steeply to meet the ice of the plateau. The rock itself forms a horseshoe around a central flat area of exposed rock and moraine. This area is covered with snow in winter and is occupied by the emperor penguins. A couple of small melt lakes form in late spring and a small stream exits to the north-east. The sides of the horseshoe are rounded ridges of rock which are bare and smoothed by ice. Otherwise the terrain is rough and dissected with cracks and fissures. The average height of the ridges is about 30 metres.

The Area also has a raised beach which is typical of several found along the coast of Mac.Robertson Land. The beach is composed of locally derived pebbles, cobbles and boulders between 1 cm and 1 m across. It slopes upwards from the shoreline to a well defined platform several metres broad and 3 to 6 m above sea level. The Area is readily defined by its natural features.

The location and boundaries of the Area are shown on Maps A, B, C and D of the Antarctic Specially Protected Area No. 101 Management Plan published at pages 22-25 of the Command Paper "The Antarctic Treaty: the Thirty-eighth Consultative Meeting held at Sofia 01 – 10 June 2015"(1).

Antarctic Specially Protected Area No. 102

Rookery Islands, Holme Bay, Mac.Robertson Land

Lat: 67°37'S; Long: 62°33'E

The Rookery Islands are a group of small islands and rocks in the south-western part of Holme Bay, Mac.Robertson Land, approximately 10 kilometres to the west of Mawson station. The Area comprises the islands and rocks lying within the rectangular area shown on the maps referenced below, the general location of which is latitude 67°37′S, longitude 62°33′E. There are no boundary markers delimiting the site.

There are approximately 75 small islands. They range in size from small rocks which barely remain above water at high tide to the largest islands of the group which are Giganteus Island (approximately 400 metres long, 400 metres wide and 30 metres high) and Rookery Island which is of similar size but slightly more elongated. Rookery Island is the highest of the group reaching an altitude of 62 metres.

1

⁽¹⁾ Cm 9356 (2016).

The location and boundaries of the Area are shown on Maps A, B and C of the Antarctic Specially Protected Area No. 102 Management Plan, published at pages 39-41 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 – 10 June 2015"(2).

Antarctic Specially Protected Area No. 103

Ardery Island and Odbert Island, Budd Coast, Wilkes Land

Lat: 66°22'S; Long: 110°28'E (Ardery Island); Lat: 66°22'S; Long: 110°33'E (Odbert Island)

Ardery Island (Lat. 66°22′S, Long. 110°28′E) and Odbert Island (Lat. 66°22′S, Long. 110°33′E) form part of the Windmill Islands group lying in the eastern end of Vincennes Bay off the Budd Coast. They are located 5 kilometres and 0.6 kilometres respectively to the west of Robinson Ridge, south of Casey Station. Odbert Island is approximately 2.5 kilometres long and 0.5 kilometres wide. In some years the island remains joined to Robinson Ridge on the mainland by sea ice. Ardery Island is a steep ice-free island approximately 1 kilometre long and 0.5 kilometres wide, with an east-west orientation.

The location and boundaries of the Area are shown on Maps A, B and C of the Antarctic Specially Protected Area No. 103 Management Plan, published at pages 57-59 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 – 10 June 2015"(3).

Antarctic Specially Protected Area No. 104

Sabrina Island, Northern Ross Sea, Antarctica

Lat: 66°55'S: Long: 16°19'E

Sabrina Island, in the Balleny Archipelago, has outstanding environmental and scientific value. It is a representative sample of the Balleny Islands which is the only oceanic archipelago located within the main Antarctic Coastal Current. The ASPA comprises all of Sabrina Island above sea level, including the Monolith, and Chinstrap Islet.

Approximately a quarter of the island is covered in permanent snow and ice, and an ice foot meets the sea at the northern end. A steep ridge runs across the island, with scoria slopes to the east and south. Sheer cliffs form the majority of the island's coast except for a cobble beach in the south-west.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 104 Management Plan, published at pages 70-71 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 – 10 June 2015"(4).

Antarctic Specially Protected Area No. 105

Beaufort Island, McMurdo Sound, Ross Sea

Lat. 76°56'S; Long. 166°56'E

The designated Area encompasses the whole of Beaufort Island above the mean high water mark, and includes adjacent fast-ice occupied by breeding Emperor penguins. The island is roughly 7 kilometres long and 3.2 kilometres wide rising to a highest point of 771 metres at Paton Peak. The coordinates include:

From the northern coast of Beaufort Island at 76°55′44″S, 166°52′42″E north to 76°55′30″S, 166°52′49″E;

⁽²⁾ Cm 9356 (2016).

⁽**3**) Cm 9356 (2016).

⁽⁴⁾ Cm 9356 (2016).

From 76°55′30″S, 166°52′49″E east to 76°55′30″S, 167°00′E;

From 76°55′30″S, 167°00′E south along the 167° longitude parallel to where it intersects with the coastline of Beaufort Island at 76°55′30″S, 167°E.

The location and boundaries of the Area are shown on Maps A, B and C of the Antarctic Specially Protected Area No. 105 Management Plan, published at pages 83-84 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 – 10 June 2015"(5).

Antarctic Specially Protected Area No. 106

Cape Hallett, Northern Victoria Land, Ross Sea

Lat: 72°19'S; Long: 170°16'E

Cape Hallett is located at the southern end of Moubray Bay, Northern Victoria Land, in the western Ross Sea. The protected area occupies most of the ice-free ground of a cuspate spit of low elevation known as Seabee Hook and includes the adjacent western slopes of the northern extremity of Hallett Peninsula, extending east of Willett Cove to the margin of the permanent glaciers.

The northern boundary of the Area extends along the northern coast of Seabee Hook to the eastern limit of the Adélie colony. The boundary then follows the edge of the nesting area of the Adélie colony, maintaining a distance of at least 5 metres from the colony.

From 170°12′25.3″E, 72°19′07.9″S the boundary extends 33 metres due west to the coast. From this coastal position, the boundary of the Area continues southward to follow the western and southern coastline of Seabee Hook, which is near the south-eastern extremity of the spit. From this location the boundary extends northward, following around the edge of the nesting area, maintaining a distance of at least 5 metres from the colony, in the south-eastern part of Seabee Hook to the position. From this coastal position, the boundary of the Area continues northward to follow the low water shoreline along the eastern coast of Seabee Hook, and then follows the low water coastline around Willett Cove to the southern boundary.

From 170°13′24.9″E, 72°19′28.0″S the boundary extends eastward to the Bornmann Glacier, following a seasonal stream which descends from the glacier. The eastern boundary of the Area then follows the glacier and permanent ice margin northward at elevations approximately between 120 – 150 metres, crossing the steep western slopes of Hallett Peninsula and following the upper outcrops of a series of rocky ridges dissecting the slope. The boundary then descends to join the northern coastline of Seabee Hook at the base of a rock buttress at.170°14′25.5″E, 72°19′05.0″S.

The location and boundaries of the Area are shown on Maps 1, 2, 3 and 4 of the Antarctic Specially Protected Area No. 106 Management Plan, published at pages 102-105 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 – 10 June 2015"(6).

Antarctic Specially Protected Area No. 107

Emperor Island, Dion Islands, Marguerite Bay, Antarctic Peninsula

Lat: 67°52'S; Long: 68°42'E

The Dion Islands, situated 13.5 kilometres south of the south-western extremity of Adelaide Island in north-western Marguerite Bay, is a small archipelago comprising the following islands, rocks and reefs: Envoy Rock, Regent Reef, Consort Islands (approximately 3 hectares), Emperor Island (approximately 5 hectares), Jester Rock, Noble Rocks, Courtier Islands (approximately 8 hectares),

⁽**5**) Cm 9356 (2016).

⁽⁶⁾ Cm 9356 (2016).

Embassy Islands and Consul Reef. The islands are generally small, rocky and precipitous, especially Emperor Island, which at a maximum elevation of 46 metres is also the highest.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 107 Management Plan, published at pages 42-43 of Part II of the Final Report of the Twenty-fifth Consultative Meeting of the Antarctic Treaty(7).

Antarctic Specially Protected Area No. 108

Green Island, Berthelot Islands, Antarctic Peninsula

Lat: 65°19'S; Long: 64°09'W

Green Island is a small island situated 150 metres north of the largest of the Berthelot Islands group, Grandidier Channel, approximately 3 kilometres off the Graham Coast of the Antarctic Peninsula. Green Island is 520 metres from north to south and 500 metres from east to west, rising to a rounded peak at a height of 83 metres. The island rises steeply on all sides, with high precipitous cliffs on the south and east side.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 108 Management Plan, published at pages 22-24 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013"(8).

Antarctic Specially Protected Area No. 109

Moe Island, South Orkney Islands

Lat: 60°44'S; Long: 45°41'W

Moe Island, South Orkney Islands, is a small irregularly-shaped island lying 300 metres off the south-western extremity of Signy Island, from which it is separated by Fyr Channel. It is about 1.3 kilometres from the north-east to south-west and 1 kilometre from north-west to south-east.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 109 Management Plan, published at pages 17-18 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-fifth Consultative Meeting held at Hobart, 11 – 20 June 2012"(9).

Antarctic Specially Protected Area No. 110

Lynch Island, South Orkney Islands

Lat: 60°39'S; Long: 45°36'W

Lynch Island is a small island situated at the eastern end of Marshall Bay in the South Orkney Islands, about 200 metres south of Coronation Island and 2.4 kilometres north of Signy Island. The 500 metres by 300 metres island has low cliffs of up to 20 metres in height on the south, east and west sides, dissected by boulder-filled gullies. The Area encompasses all of the ice-free ground, permanent ice and semi-permanent ice found within Lynch Island, but excludes the marine environment extending greater than 10 metres offshore from the low tide water line. The island supports one of the most extensive and dense areas of grass (*Deschampsia antarctica*) known in the Treaty area and provides an outstanding example of a rare natural ecological system.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 110 Management Plan, published at pages 34-36 of the Command Paper "The

⁽⁷⁾ Part II of the Final Report of the Twenty-fifth Consultative Meeting of the Antarctic Treaty can be found on the Antarctic Treaty Secretariat website at http://www.ats.aq/devAS/info_finalrep.aspx?lang=e&menu=2.

⁽⁸⁾ Cm 8841 (2014).

⁽⁹⁾ Cm 8810 (2014).

Antarctic Treaty: Measures adopted at the Thirty-fifth Consultative Meeting held at Hobart, 11 – 20 June 2012"(10).

Antarctic Specially Protected Area No. 111

Southern Powell Island and adjacent islands, South Orkney Islands

Lat: 62°57'S; Long: 60°38'W

The Area includes all of Powell Island south of the southern summit of John Peaks (415 metres altitude), together with the whole of Fredriksen Island, Michelsen Island (a tidal peninsula at the southern tip of Powell Island), Christoffersen Island, Grey Island and unnamed adjacent islands. The Area encompasses all of the ice-free ground, permanent ice and semi-permanent ice found within the boundaries, but excludes the marine environment extending greater than 10 metres offshore from the low tide water line. All but the Crutchley Ice Piedmont of southern Powell Island are ice-free in summer, though there are patches of semi-permanent or late-lying snow in places.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 111 Management Plan, published at pages 49-50 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-fifth Consultative Meeting held at Hobart, 11 – 20 June 2012"(11).

Antarctic Specially Protected Area No. 112

Coppermine Peninsula, Robert Island, South Shetland Islands

Lat: 62°24'S; Long: 59°30'W

Coppermine Peninsula is located at the north-western end of Robert Island. It covers an elongated strip (2 kilometres long by 500 metres wide), from the isthmus connecting Robert Island to Cape Fort Williams. It has an irregular relief, with average heights of 30 to 40 metres above sea level, and many protrusions reaching over 80 metres above sea level. The peninsula is connected to Robert Island through a terrace-shaped isthmus featuring marine gravel, about 10 metres above sea level, and 250 metres wide.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 112 Management Plan, published at page 64 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-fifth Consultative Meeting held at Hobart, 11 – 20 June 2012"(12).

Antarctic Specially Protected Area No. 113

Litchfield Island, Arthur Harbour, Anvers Island, Palmer Archipelago

Lat: 64°46'S; Long: 64°06'W

Litchfield Island (0.35 square kilometres) is situated in Arthur Harbour approximately 1500 metres west of Palmer Station (United States). The island measures approximately 1000 metres north-west to south-east and 700 metres from north-east to south-west. It has the most varied topography and greatest diversity of terrestrial habitats of the islands in Arthur Harbour. The area is defined as all of Litchfield Island above the low tide water level excluding all offshore islets and rocks. No boundary markers have been installed as the coast is clearly defined and is a visually obvious boundary feature.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 113 Management Plan, published at pages 25-26 of the Command Paper "The

⁽¹⁰⁾ Cm 8810 (2014).

⁽¹¹⁾ Cm 8810 (2014).

⁽¹²⁾ Cm 8810 (2014).

Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014"(13).

Antarctic Specially Protected Area No. 115

Lagotellerie Island, Marguerite Bay, Graham Land

Lat: 67°53'20"S; Long: 67°25'30"W

Lagotellerie Island, Marguerite Bay, Graham Land is approximately 2 kilometres by 1.3 kilometres, oriented generally in an east-west direction. The Area is 11 kilometres south of Pourquoi Pas Island and 3.25 kilometres west of the south end of Horseshoe Island. The Area includes all of Lagotellerie Island and unnamed adjacent islands and islets. Boundary markers have not been installed because the coast itself is a clearly defined and visually obvious boundary. Lagotellerie Island is steep-sided and rocky, with about 13% permanent ice cover, most of which is on the southern slopes. The island rises to twin peaks of 268 metres and 288 metres separated by a broad saddle at around 200 metres.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 115 Management Plan, published at pages 82-84 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-fifth Consultative Meeting held at Hobart, 11 – 20 June 2012"(14).

Antarctic Specially Protected Area No. 116

New College Valley, Caughley Beach, Cape Bird, Ross Island

Lat: 77°13'S; Long: 166°26'30"E

New College Valley is located south of Cape Bird on ice-free slopes above Caughley Beach which lies between the Cape Bird Northern and Middle Rookeries. The boundaries of the Area follow the ridges enclosing the catchment of the New College Valley.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 116 Management Plan, published at pages 17-18 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth consultative meeting held at Buenos Aires, 20 June – 1 July 2011"(**15**).

Antarctic Specially Protected Area No. 117

Avian Island, Marguerite Bay, Antarctic Peninsula

Lat: 67°46'S; Long: 68°54'W

Avian Island is situated in the north-west of Marguerite Bay, 400 metres south of the south-western extremity of Adelaide Island. The island is 1.45 kilometres long by 0.8 kilometres at its widest, and is of roughly triangular shape. It is rocky with a low relief of generally less than 10 metres in the north, rising to about 30 metres at the centre, and 40 metres in the south where several rock and ice slopes of up to 30 metres drop steeply to the sea. The coastline is irregular and rocky with numerous offshore islets, although there are several accessible beaches on the northern and eastern coasts. The designated Area comprises the whole of Avian Island and the littoral zone, offshore islets and rocks, and a buffer zone of the surrounding marine environment (including sea ice when present) within 100 metres of the shoreline of the main island.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 117 Management Plan, published at pages 47-49 of the Command Paper "The

⁽¹³⁾ Cm 9150 (2015).

⁽¹⁴⁾ Cm 8810 (2014).

⁽¹⁵⁾ Cm 8809 (2014).

Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 - 29 May 2013"(16).

Antarctic Specially Protected Area No. 119

Davis Valley and Forlidas Pond, Dufek Massif, Pensacola Mountains

Lat: 82°27'S; Long: 51°05'W (Davis Valley); Lat: 82°27'S; Long: 51°16'W (Forlidas Pond)

The Area comprises all of the Davis Valley and the immediately adjacent ice-free valleys, including several of the valley glaciers within these catchments. The boundary predominantly follows the margins of the surrounding ice fields of the Ford Ice Piedmont and Sallee Snowfield, which enclose the ice-free area that is considered to be of outstanding value. The northern boundary extends parallel to and 500 metres north from the southern margin of the Ford Ice Piedmont in the Davis Valley and in the adjacent valley containing Forlidas Pond, extending from 51°24′02″W, 82°26′23.4″S in the northwest to 50°52′10″W, 82°26′45.5″S in the northeast. This provides a buffer of protection around the freshwater bodies of value along the northern glacier margin. The eastern boundary follows the ice margin along Wujek Ridge from the Ford Ice Piedmont to Mount Pavlovskogo. The southeastern boundary extends from Mount Pavlovskogo across the Sallee Snowfield and the upper slopes of the Edge Glacier, following areas of outcrop where they exist to Mount Beljakova. The southern and western boundaries of the Area follow the margins of the permanent ice, with the southernmost extent being at 51°17′00″W, 82°33′20″S. The boundary encompasses a total area of 55.8 square kilometres.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 119 Management Plan, published at pages 125-126 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01-10June 2015"(17).

Antarctic Specially Protected Area No. 120

Pointe-Géologie Archipelago, Terre Adélie

Lat: 66°40'S; Long: 140°02'E

ASPA 120 is located along the Terre Adélie coast, in the heart of the Cape Geology Archipelago coastal area of Adélie Coast (Lat: 66°39'S to 66°40'S; Long: 140° to 140°02'E). The Area comprises the territories of: Jean Rostand Island; Le Mauguen (formerly Alexis Carrel) Island; Lamarck Island; Claude Bernard Island; the 'Bon Docteur' Nunatak; and the Emperor penguins breeding grounds, on the pack ice which surrounds the islands in winter.

As a whole, the surface of the rock outcrops does not exceed 2 square kilometres. The highest points are distributed along North-East-South-West ridges. During the summer, the pack ice between the islands disappears, and only the southern flanks of the islands are still covered by firns. The Area is then clearly limited by natural markers (island outlines and rocky outcrops). No tracks or roads exist in the Area.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 120 Management Plan, published at pages 22-23 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth consultative meeting held at Buenos Aires, 20 June – 1 July 2011"(18).

Antarctic Specially Protected Area No. 121

Cape Royds, Ross Island

⁽¹⁶⁾ Cm 8841 (2014).

⁽¹⁷⁾ Cm 9356 (2016).

⁽¹⁸⁾ Cm 8809 (2014).

Lat: 77°33'S; Long: 166°10'E

Cape Royds is situated at the western extremity of Ross Island, McMurdo Sound, on a coastal strip of ice-free land approximately 8 kilometres wide, on the lower western slopes of Mount Erebus. The Area comprises both a terrestrial and marine component.

The terrestrial component of the Area consists of ice-free land within approximately 350 metres of Flagstaff Point that is seasonally occupied by a breeding Adélie penguin (*Pygoscelis adeliae*) colony. The boundary includes all of the area occupied by breeding penguins and the main southern route used by the penguins to access the sea.

The marine component of the Area encompasses the area within 500 metres of the mean high water coastline of Flagstaff Point, with the boundary extending 500 metres south-east from Derrick Point (Lat: 77°33′14.1″S; Long: 166°10′22″E) to the south-eastern corner of the Area at Lat: 77°33′27″S; Long: 166°11′08″E, thence westward maintaining a distance of 500 metres from the shore to Lat: 77°33′11.8″S; Long: 166°08′10″E, thence due east 500 metres to coast at the north-western corner of the Area at Lat: 77°33′11.8″S; Long: 166°9′25″E.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 121 Management Plan, published at pages 44-45 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014"(19).

Antarctic Specially Protected Area No. 122

Arrival Heights, Hut Point Peninsula, Ross Island

Lat: 77°49'S; Long: 166°40'E

Arrival Heights is a small range of low hills located near the south-western extremity of Hut Point Peninsula, Ross Island, approximately 1.5 kilometres north of McMurdo Station and 2.7 kilometres north-west of Scott Base. Hut Point Peninsula is composed of a series of volcanic craters extending from Mount Erebus, two of which, namely First Crater and Second Crater, respectively form part of the southern and northern boundaries of the Area. The Area is predominantly ice-free and elevations range from 150 metres to a maximum of 280 metres at Second Crater.

The south-eastern boundary corner of the Area is defined by Trig T510 No.2, the centre of which is located at 77°50′08.4″S, 166°40′16.4″E at elevation of 157.3 metres, Trig T510 No.2 replaced, and is 0.7 metres from, the former boundary survey marker (T510) which no longer exists. The replacement T510 No.2 marker is an iron rod (painted orange) installed into the ground approximately 7.3 metres west of the access road to Arrival Heights, and is surrounded by a small circle of rocks. The boundary of the Area extends from Trig T510 No.2 in a straight line 656.0 metres north-west over First Crater to a point located at 77°49′53.8″S, 166°39′03.9″E at 150 metres elevation. The boundary thence follows the 150 metres contour northward for 1186 metres to a point (Lat: 77°49′18.6″S, Long: 166°39′56.1″E) due west of the northern rim of Second Crater. The boundary line thence extends 398 metres due east to Second Crater, and around the crater rim to a United States of America Hydrographic Survey marker (a stamped brass disk) which is installed near ground level at 77°49′23.4″S, 166°40′59.0″E and 282 metres elevation, forming the north-eastern boundary of the Area. The boundary thence extends from the United States of America Hydrographic Survey marker southward for 1423 metres in straight line to Trig T510 No.2.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 122 Management Plan, published at pages 44-45 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth consultative meeting held at Buenos Aires, 20 June – 1 July 2011"(20).

⁽¹⁹⁾ Cm 9150 (2015).

⁽²⁰⁾ Cm 8809 (2014).

Antarctic Specially Protected Area No. 123

Barwick and Balham Valleys, South Victoria Land

Lat: 77°21'S; Long: 161°57'E

Barwick Valley is situated about 65 kilometres inland from the Ross Sea coast of South Victoria Land. The Area includes Barwick and Balham Valleys and their respective catchments and is bordered on the south, west and north by the McKelvey Valley, the Willet Range and the divide between the Victoria and Barwick Valleys, respectively.

The location and boundaries of the Area are shown on Map 1 of the Antarctic Specially Protected Area No. 123 Management Plan, published at page 66 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013" (21).

Antarctic Specially Protected Area No. 124

Cape Crozier, Ross Island

Lat: 77°30'S; Long: 169°21'E

Cape Crozier is at the eastern extremity of Ross Island, where an ice-free area comprises the lower eastern slopes of Mount Terror. The designated area is situated in the vicinity of Post Office Hill (407 metres), extending to encompass the adjacent Ross Ice Shelf where large cracks in the shelf are covered by fast-ice which is occupied annually by breeding emperor penguins.

The Area includes a terrestrial region and ice shelf above the mean high water mark as well as the adjacent fast-ice within the boundaries occupied by breeding emperor penguins. The north boundary of the Area extends 6.5 kilometres along the 77°26′00″S line of latitude from 169°11′30″E to 169°28′00″E. The western boundary extends 1.5 kilometres south from the northern boundary to the coast, thence in a south-westerly direction following a low ice-free ridge that passes 30 metres west of the field hut and helicopter pad. The boundary then follows this ridge in a southerly direction to the saddle south-west of the summit of Post Office Hill at 169°11′30″E, 77°28′00″S, before following the 169°11′30″E line of longitude south to a point at 169°11′30″E, 77°31′00″S, which is close to the summit of Bomb Peak (740 metres). The boundary extends down the south-east ridge of Bomb Peak to Igloo Spur at 169°20′00″E, 77°32′00″S, from where it extends due east along latitude 77°32′00″S to the east boundary at 169°28′00″E.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 124 Management Plan, published at pages 61-62 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014"(22).

Antarctic Specially Protected Area No. 125

Fildes Peninsula, King George Island

(Fossil Hill, "Holz/Madera Stream", Bellingshausen Dome, Halfthree Point, Suffield Point, Fossil Point, Gradzinski Cove and Skuabucht)

Lat: 62°12'S; Long: 58°58'W

The Fildes Peninsula is the most extensive coastal area free of snow in summer in King George Island, with a length of around 7 kilometres. In general terms, appears as a tableland made up of old coastal landforms, with an average height of 30 metres above sea level and rocky outcrops around the 100 metres. It is a territory with its own special characteristics different from those of the rest of the island, which is covered by the ice from the Bellinghausen Dome.

⁽²¹⁾ Cm 8841 (2014).

⁽²²⁾ Cm 9150 (2015).

Eight different zones comprise ASPA No 125, four of them located in the southern coast of Fildes Peninsula, two of them in the northern coast, one in the central southern part of Fildes and the last one, in the vicinity of the glacier:

125a: the zone located on Fossil Hill (Lat: 62°12′22″S; Longs: 58°59′03″W), in the central south part of Fildes Peninsula. It comprises an area of 0.568 square kilometres.

125b: the zone located by "*Holz/Madera Stream*" (Lat: 62°11′27″S; Long: 58°56′19″W), in the south-east part of Fildes Peninsula. It comprises two areas crossed by the road that connect Artigas Station with the other Stations in the southern part of the peninsula. The total area compromised is 0.178 square kilometres (zone 125b1: 0.104 square kilometres and zone 125b2: 0.074 square kilometres).

125c: the buffer zone surrounding the snout of the Bellinghausen Dome (Collins glacier) (Lat: 62°10′11″S; Long: 58°55′18″W). It comprises an area of 1.412 square kilometres.

125d: the zone surrounding Halfthree Point (Lat: 62°13′34″S; Long: 58°56′56″W) and Dario Point, facing Maxwell Bay The zone has an area of 0.019 square kilometres.

125e: the zone located at Suffield Point (Lat: 62°11′34″S; Long: 58°55′16″W), in front of Maxwell Bay. It has an area of 0.024 square kilometres.

125f: the zone that compromise Fossil Point (Lat: 62°11′16″S; Long: 58°54′30″W), facing Maxwell Bay, with an area of 0.013square kilometres.

125g: zone located in the northern part of Gradzinski Cove (Lat: 62°09′12″S; Long: 58°56′16″W), also known as Biologists Bay, with an access from Klotz Valley. The zone is located in the northern coast of Fildes Peninsula and has an area of 0.021 square kilometres.

125h: zone in the vicinity of Skuabucht (Lat: 62°10′44″S; Long: 58°58′59″W), covered by the Fuschloger beach, in the northern coast of Fildes Peninsula. The zone has a total area of 0.117 square kilometres.

The location and boundaries of the Area are shown on Maps 1, 2, 3, 4, 5, 6, 7, 8 and 9 of the Antarctic Specially Protected Area No. 125 Management Plan, published at pages 134-142 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-second Consultative Meeting held at Baltimore 6 - 17 April 2009"(23).

Antarctic Specially Protected Area No. 126

Byers Peninsula, Livingston Island, South Shetland Islands

Lat: 62°35'S; Long: 61°13'W

Byers Peninsula is situated at the west end of Livingston Island, the second largest of the South Shetland Islands. The peninsula has a central west-east extent of about 9 kilometres and north-west-south-east extent of 18.2 kilometres, and is the largest ice-free area in the South Shetland Islands. The peninsula is generally a low, gently rolling relief, although there are a number of prominent hills ranging in altitude between 80-265 metres. The interior is dominated by a series of extensive platforms at altitudes of up to 105 metres, interrupted by isolated volcanic plugs such as Chester Cone (188 metres) and Cerro Negro (143 metres).

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 126 Management Plan, published at pages 70-71 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth consultative meeting held at Buenos Aires, 20 June – 1 July 2011"(24).

⁽²³⁾ Cm 8048 (2011).

⁽²⁴⁾ Cm 8809 (2014).

Antarctic Specially Protected Area No. 127

Haswell Island (and Adjacent Emperor Penguin Rookery on Fast Ice), David Sea

Lat: 66°31'S; Long: 93°00'E

The Area consists of Haswell Island (approximately 1 square kilometre) and its littoral zone and the adjacent section of fast ice in the Davis Sea (the fast ice is approximately 5 square kilometres when present). This is a unique breeding site for almost all breeding bird species in East Antarctica.

The location and boundaries of the Area are shown on Maps 1, 2, 3 and 4 of the Antarctic Specially Protected Area No. 127 Management Plan, published at pages 85-88 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth consultative meeting held at Buenos Aires, 20 June – 1 July 2011" (25).

Antarctic Specially Protected Area No. 128

Western Shore of Admiralty Bay, King George Island, South Shetland Islands

Lat: 62°13'S; Long: 58°28'W

The Area consists of land on the western shore of Admiralty Bay, King George Island, South Shetland Islands. Approximately 20% of the Area is ice-free. More generally glacial, nival and coastal marine processes heavily shape the terrain. The area contains diverse avian and mammalian fauna and is home to large colonies of Adélie Penguin and Gentoo Penguin.

The eastern boundary of the Area follows the coastline on the western shore of Admiralty Bay from the south-eastern extremity of Halfmoon Cove (58°27′49″W, 62°09′44″S) for 6 kilometres south-south-east to Demay Point. The boundary thence follows the coastline south-west around Paradise Cove and Utchatka Point approximately 3.5 kilometres to Telefon Point (58°28′28″W, 62°14′03″S). From Telefon Point the boundary extends northward in a straight line for 2.3 kilometres to The Tower (367 m; 58°28′48″W, 62°12′55″S), a distinctive peak above Tower Glacier. The boundary continues in this direction a further 5.3 kilometres to Jardine Peak (285 metres; 58°29′54″W, 62°10′03″S). The boundary descends eastward in a straight line from Jardine Peak for 1.7 kilometres to the highest point on Penguin Ridge, 550 metres from Arctowski Station. The boundary thence extends northeast for 0.3 kilometres to the southeast coast of Halfmoon Cove. A marker is placed in Halfmoon Cove on the northern boundary of the Area at 58°27′48.7″W 62°09′43.7″S, 500 metres southeast of Arctowski station.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 128 Management Plan, published at pages 82-83 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014"(26).

Antarctic Specially Protected Area No. 129

Rothera Point, Adelaide Island

Lat: 67°34'S; Long: 68°08'W

Rothera Point is situated in Ryder Bay at the south-east corner of Wright Peninsula on the east side of Adelaide Island south-west Antarctic Peninsula.

The Area is the northern one-third of Rothera Point extending approximately 280 metres from west to east and 230 metres from north to south, rising to a maximum height of 36 metres. At the coast the boundary is the 5 metres contour (formerly the 2.5 metres contour). The Area does not include any upper shore, littoral or sub-littoral areas of Rothera Point. The southern boundary of the Area

⁽²⁵⁾ Cm 8809 (2014).

⁽²⁶⁾ Cm 9150 (2015).

runs across Rothera Point and is partially marked by rock filled gabions. Rothera Research Station (United Kingdom) lies approximately 250 metres west of the western boundary.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 129 Management Plan, published at pages 95-96 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-fifth Consultative Meeting held at Hobart, 11 – 20 June 2012"(**27**).

Antarctic Specially Protected Area No. 131

Canada Glacier, Lake Fryxell, Taylor Valley, Victoria Land

Lat: 77°37'S; Long: 163°03'E

Canada Glacier is situated in the Taylor Valley, in the McMurdo Dry Valleys. The designated Area encompasses most of the glacier forefront area on the east side of the lower Canada Glacier, on the north shore of Lake Fryxell. It comprises gently to moderately sloping ice-free ground at an elevation of 20 metres to 220 metres with seasonal melt water ponds and streams draining Canada Glacier into Lake Fryxell. The Area is designated primarily to protect the site's scientific and ecological values on the grounds that it contains some of the richest plant growth (bryophytes and algae) in the McMurdo Dry Valleys.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 131 Management Plan, published at pages 100-101 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth consultative meeting held at Buenos Aires, 20 June – 1 July 2011"(28).

Antarctic Specially Protected Area No. 132

Potter Peninsula, King George Island, South Shetland Islands

Lat: 62°15'S; Long: 58°39'W

This Area is located on the east coast of Maxwell Bay, south-west of King George Island, between the southern tip of Mirounga Point (north-west of Potter Peninsula) and the outcrop known as "Spur 7", on the north-eastern border of Stranger Point. The area stretches along the coastal strip up at low tide water levels up to the cliff edge, which reaches heights of 15-50 metres. The front of the cliff edge is included within the ASPA. This coastal strip has a variable width, stretching up to 500 metres from the shore at low tide water levels.

The location and boundaries of the Area are shown on Map 1 of the Antarctic Specially Protected Area No. 132 Management Plan, published at page 82 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013"(29).

Antarctic Specially Protected Area No. 133

Harmony Point, Nelson Island, South Shetland Islands

Lat: 62°18'S; Long: 59°14'W

The Area is located in the west coast of Nelson Island between King George Island, to the north-east, and Robert Island, to the south-west, and includes Harmony Point and the Toe, the sector covered by ice and the adjacent marine area.

The values to be protected in the Area still relate to the composition and biological diversity of the site. Ice-free land supports large breeding colonies of 12 seabird species, among which is one of the largest single colonies of chinstrap penguin (Pygoscelis antarctica) in Antarctica. In the Area,

⁽²⁷⁾ Cm 8810 (2014).

⁽²⁸⁾ Cm 8809 (2014).

⁽²⁹⁾ Cm 8841 (2014).

there is also a large giant petrel colony (Macronectes gianteus), a species which is highly sensitive to human disturbance, and a large colony of Gentoo penguin (Pygoscelis papua). The Area has profuse vegetation, developed on various types of soils, particularly characterized by the presence of vast moss carpets, as well as lichens and fungi. It is also possible to find two species of vascular plants in the Area. As vegetation is one of the factors responsible for soil formation, the protection of the Area ensures the development of research linked to the soils and the flora present in the Area.

The location and boundaries of the Area are shown on Map 1 of the Antarctic Specially Protected Area No. 133 Management Plan, published at page 105 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-fifth Consultative Meeting held at Hobart, 11 – 20 June 2012"(30).

Antarctic Specially Protected Area No. 134

Cierva Point and Offshore Islands, Danco coast, Antarctic Peninsula

Lat: 64°10'S; Long: 60°57'W

Cierva Point is located on the south coast of Cierva Cove, to the north of Hughes Bay, between the Danco and Palmer Coasts, in the north-western portion of the Antarctic Peninsula. The site comprises the ice-free area between the south-west coast of Cierva Cove and the north-east coast of Santucci Cove. Also included are Apéndice (Lat: 64°11'41.99"S; Long: 61°01'3.25"W) and José Hernández islands (Lat: 64°10′10.06″S; Long: 61°06′11.34″W) and Moss (Lat: 64°10′2.22″S; Long: 61°01'49.43"W) and Penguin islets (Lat: 64°08'35.90"S; Long: 60°59'11.43"W), found to the west/ south-west of Cierva Point. Although the intertidal zone of each of these areas is included in the Area, the subtidal marine environment is not.

The location and boundaries of the Area are shown on Figures 1, 2 and 3 of the Antarctic Specially Protected Area No. 134 Management Plan, published at pages 99-101 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 - 29 May 2013"(**31**).

Antarctic Specially Protected Area No. 135

North-East Bailey Peninsula, Budd Coast, Wilkes Land

Lat: 66°17'S; Long: 110°32'E

The Area is located on Bailey Peninsula in the Windmill Islands region of Budd Coast, Wilkes Land, East Antarctica. Bailey Peninsula is an area of rock exposures and permanent snow and ice fields lying between Newcomb Bay and O'Brien Bay, two kilometres south of Clark Peninsula.

The Area is located in the north-east of Bailey Peninsula, approximately 200 metres east of Casey station (Lat: 66°16′59.9"S, Long: 110°31′59.9"E), and covers an area of approximately 0.28 square kilometres. The boundary is irregular, extending in the north to within approximately 70 metres south of Brown Bay.

Topographically, Bailey Peninsula comprises low lying, rounded ice-free rocky outcrops (maximum altitude approximately 40 metres), which rise from the coast to the Løken Moraines (altitude approximately 130 metres). Intervening valleys are filled with permanent snow or ice, or glacial moraine and exfoliated debris, and contain water catchment areas.

The location and boundaries of the Area are shown on Maps A, B, C, D and E of the Antarctic Specially Protected Area No. 135 Management Plan, published at pages 136-139 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 - 29 May 2013"(32).

⁽³⁰⁾ Cm 8810 (2014).

⁽³¹⁾ Cm 8841 (2014).

⁽³²⁾ Cm 8841 (2014).

Antarctic Specially Protected Area No. 136

Clark Peninsula, Budd Coast, Wilkes Land, East Antarctica

Lat: 66°15'S; Long: 110°36'E

Clark Peninsula is an area of rock exposures and permanent ice and snow fields situated on the north side of Newcomb Bay at the east end of Vincennes Bay on Budd Coast, Wilkes Land. The Area covers approximately 9.4 square kilometres. The Clark Peninsula ASPA is designated primarily to protect the largely undisturbed terrestrial ecosystem, which supports one of the most extensive and best developed plant communities on continental Antarctica, outside the Antarctic Peninsula. The Area has rich associations of macrolichens and bryophytes that occupy very specific ecological niches. Within the relatively complex plant communities, 33 species of bryophytes and macrolichens have been found with 11 cryptogamic (soil surface) vegetation associations being identified. As such, the Area has intrinsic ecological value and scientific importance, particularly in the fields of botany, microbiology, soil science and glacial geomorphology.

The location and boundaries of the Area are shown on Maps A, B, C, and D of the Antarctic Specially Protected Area No. 136 Management Plan, published at pages 96-99 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014"(33).

Antarctic Specially Protected Area No. 137

Northwest White Island, McMurdo Sound

Lat: 78°03'S; Long: 167°18'E

White Island, part of the McMurdo volcanic complex, is situated approximately 20 kilometres southeast of the edge of the McMurdo Ice Shelf and 25 kilometres south-east of Hut Point, the location of McMurdo Station (United States) and Scott Base (New Zealand) on Ross Island. The roughly triangular island is approximately 30 kilometres long and 15 kilometres wide at its maximum, and rises to a maximum elevation of 762 metres in several locations.

The island is predominantly ice-covered with most of the rock outcrops being in the north; it is completely surrounded by permanent shelf ice, between 10 metres and 100 metres in thickness, of the McMurdo Ice Shelf and Ross Ice Shelf.

The Area includes 142 square kilometres of the shelf ice and open-water cracks of both the Ross Ice Shelf and McMurdo Ice Shelf up to 5 kilometres offshore north-east, north and west from the White Island coast. The north-eastern boundary extends from the north-eastern coast of Cape Spencer-Smith (Long: 167°32′42″E, Lat: 78°00′43″S) 5 kilometres due east to 167°46′37″E, 78°00′43″S. The boundary then extends north-west, and follows a line parallel to and 5 kilometres from the coast, around Cape Spencer Smith and then heading south-west to 167°00′00″E, 78°05′00″S. The boundary then extends due south for 7.8 kilometres to 167°00′00″E, 78°09′12″S, and thence 1.5 kilometres east to the southern-most significant outcrop of rock on the western coast of White Island (Long: 167°05′00″E, Lat: 78°09′12″S). The boundary then extends northwards, following the coastline around Cape Spencer Smith to the north-eastern limit of the Area. The White Island coast is distinguished by a change in surface slope where the transition between the floating ice-shelf and land occurs: the transition is in some places gradual and indistinct, and the exact position of the coast is not precisely known. For this reason the coastal (generally east) boundary of the Area is considered to follow the line of the coast as evidenced by a surface elevation rise towards the land of two metres above the average elevation of the adjacent McMurdo Ice Shelf.

The location and boundaries of the Area are shown on Map 1 of the Antarctic Specially Protected Area No. 137 Management Plan, published at page 158 of the Command Paper "The Antarctic

⁽³³⁾ Cm 9150 (2015).

Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013"(34).

Antarctic Specially Protected Area No. 138

Linnaeus Terrace, Asgard Range, Victoria Land

Lat: 77°36'S; Long: 161°05'E

Linnaeus Terrace is a bench of weathered Beacon Sandstone approximately 1.5 kilometres in length and 1 kilometre in width at an elevation of about 1600 metres. It is located at the western end of the Asgard Range, 1.5 kilometres north of Oliver Peak. The Area overlooks the South Fork of the Wright Valley, is approximately 4.5 kilometres from Don Juan Pond and approximately 10 kilometres from the terminus of the Wright Upper Glacier.

The lower (northern) boundary of the Area is characterized by the presence of a predominantly sandstone outcrop of approximately 3 metres in height which extends for much of the length of the terrace. The lower boundary of the Area is defined as the upper edge of this outcrop, and as straight lines adjoining the visible edges where the outcrop is covered by surface talus. The upper (south-western) boundary of the Area is characterized by a line of sandstone outcrop of about 2-5 metres in height, occurring between the elevations of 1660-1700 metres about 70 metres above the general elevation of the terrace. The upper boundary of the Area is defined as the uppermost edge of this outcrop, and shall be considered a straight line between the visible edges where the outcrop is covered by surface talus. The western end of the Area is defined as where the terrace narrows and merges with a dolerite talus slope on the flank of the north-western ridge of Oliver Peak. The boundary at the west dips steeply from where the upper outcrop disappears, following the border of the dolerite talus with the terrace sandstone down to the westernmost corner. The east boundary is defined as the 1615 metre contour, which follows closely the edge of an outcrop which extends much of the width of the terrace. At the southernmost corner of the Area the terrace merges with the slopes into the valley to the east: from this point the boundary extends upward to the 1700 metre contour, from where it follows the line of outcrop defining the south-western boundary.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 138 Management Plan, published at pages 174-175 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 - 29 May 2013"(**35**).

Antarctic Specially Protected Area No. 139

Biscoe Point, Anvers Island, Palmer Archipelago

Lat: 64°48'S; Long: 63°47'W

Biscoe Point is at the western extremity of a small island located close to the southern coast of Anvers Island approximately 6 kilometres south of Mount William. This island is separated from Anvers Island by a 50 metres wide permanent marine channel. The Area is defined to include all land above the low tide water level of the main island on which Biscoe Point is situated (0.53 square kilometres), all offshore islets and rockets within 100 metres of the shore of this main island and most of the predominantly ice-free promontory 300 metres to the north (0.1 square kilometres).

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 139 Management Plan, published at pages 117-119 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014"(36).

⁽³⁴⁾ Cm 8841 (2014).

⁽³⁵⁾ Cm 8841 (2014).

⁽³⁶⁾ Cm 9150 (2015).

Antarctic Specially Protected Area No. 140

Parts of Deception Island, South Shetland Islands

Lat: 62°57'S; Long: 60°38'W

The primary reason for the designation of Parts of Deception Island, South Shetland Islands, as an ASPA is to protect environmental values, predominantly the terrestrial flora within the Area. The flora of the island is unique in Antarctic terms, particularly where associated with these geothermal areas, but also because of the recently formed surfaces that provide known-age habitats for the study of colonisation and other dynamic ecological processes by terrestrial organisms.

ASPA 140 makes a substantial contribution to the Antarctic protected areas system as it (a) contains a particularly wide diversity of species, (b) is distinct from other areas due to the geothermally-heated ground in some parts of the island which create habitats of great ecological importance unique to the Antarctic Peninsula region and (c) is vulnerable to human interference, in particular, due to highly restricted spatial distribution of many plant species, particularly those associated with heated ground. While ASPA 140 is protected primarily for its outstanding environmental values (specifically its biological diversity) it is also protected for its scientific values (i.e., for terrestrial biology, zoology, geomorphology and geology). In particular, scientific research includes long-term colonisation studies and ground temperature measurements. The 11 Sites within the Area (approximately 2.4square kilometres) encompass terrestrial and lagoon habitats around geothermally heated ground, areas of rich flora and known-age surfaces created following eruptions of 1967, 1969 and 1970 (Deception Island is an active volcano).

ASPA 140's 11 Sites are comprised of:

Site A - Collins Point

Site B - Crater Lake

Site C – Caliente Hill, southern end of Fumarole Bay

Site D - Fumarole Bay

Site E – west of Stonethrow Ridge

Site F - Telefon Bay

Site G - Pendulum Cove

Site H - Mt. Pond

Site J - Perchuć Cone

Site K – Ronald Hill to Kroner Lake

Site L - South East Point

The location and boundaries of the Area are shown on Figures 1, 1a, 1b, 1c and 1d of the Antarctic Specially Protected Area No. 140 Management Plan, published at pages 121-125 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-fifth Consultative Meeting held at Hobart, 11 - 20 June 2012"(37).

Antarctic Specially Protected Area No. 141

Yukidori Valley, Langhovde, Lützow-Holm Bay

Lat: 69°14'S; Long: 39°46'E

The Yukidori Valley (69°00′30″S, 39°46′00″E) is situated in the middle part of Langhovde, on the east coast of Lützow-Holm Bay, Continental Antarctica. The Area encompasses 2.0-2.5 kilometres by 1.8 kilometres, located between a tongue of the ice cap and sea at the western end of the Valley. The fellfield ecosystem and long-term monitoring sites are contained entirely within Yukidori Valley,

⁽³⁷⁾ Cm 8810 (2014).

and the Area boundary is designed to afford protection to the entire valley/catchment system. The Area does not include any marine area.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 141 Management Plan, published at pages 129-131 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April -07 May 2014"(38).

Antarctic Specially Protected Area No. 142

Svarthamaren

Lat: 71°55'S; Long: 5°15'E

The Svarthamaren ASPA is situated in Mühlig-Hoffmannfjella, Dronning Maud Land, stretching from approx. 71°53′16"S - 5°9′24"E to the north-east to approx. 71°56′10"S -5°15′37"E in the south-east. The distance from the ice front is about 200 kilometres. The Area covers approximately 7.5 km2, and consists of the ice-free areas of the Svarthamaren nunatak, including the areas in the immediate vicinity of the ice-free areas naturally belonging to the nunatak (i.e. rocks). The Norwegian field station Tor is located in the Svarthamaren nunatak at Lat. 71°53′22″S, 5°9′34″E. The station, including a 10-metre buffer zone around the station buildings, is excluded from the Svarthamaren Antarctic Specially Protected Area.

The location and boundaries of the Area are shown on Maps A, B and C of the Antarctic Specially Protected Area No. 142 Management Plan, published at pages 140-142 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014"(39).

Antarctic Specially Protected Area No. 143

Marine Plain, Mule Peninsula, Vestfold Hills, Princess Elizabeth Land

Lat: 68°37'S; Long: 78°07'E

Marine Plain ASPA lies approximately 10 kilometres south-east of Davis station in the Vestfold Hills. The Area (23.4 square kilometres) opens into an arm of Crooked Fjord on the southern side of Mule Peninsula, the southernmost of the three major peninsulas that comprise the Vestfold Hills. The Vestfold Hills are a largely ice-free oasis of approximately 512 square kilometres of bedrock, glacial debris, lakes, and ponds, at the eastern side of Prydz Bay, Princess Elizabeth Land.

The Area includes Marine Plain (approximately 3 square kilometres), which occupies the centre of the Area in a north-south orientation. Pickard Ridge (maximum elevation of 70 metres) separates this site from Poseidon Basin in the north-east.

The location and boundaries of the Area are shown on Maps A, B and C of the Antarctic Specially Protected Area No. 143 Management Plan, published at pages 197-199 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 - 29 May 2013"(**40**).

Antarctic Specially Protected Area No. 145

Port Foster, Deception Island, South Shetland Islands

Lat: 62°57'S; Long: 60°38'W

The Area comprises two main sites (sub-sites A and B) within Port Foster.

⁽³⁸⁾ Cm 9150 (2015).

⁽³⁹⁾ Cm 9150 (2015).

⁽⁴⁰⁾ Cm 8841 (2014).

Benthic habitat A: between 50 and 150 metres depths and the co-ordinates: Lat: 62°55.5'S, Long: 60°38′00″W and Lat: 62°56.2′S, Long: 60°37′00″W.

Benthic habitat B: between 100 and 150 metres depths and the co-ordinates: Lat: 62°57.2'S, Long: 60°37′20″W and Lat: 62°57.9′S, Long: 60°36′20″W.

The location and boundaries of the Area are shown on Figure 1 of the Antarctic Specially Protected Area No. 145 Management Plan, published at page 291 of the Command Paper "The Antarctic Treaty: Measures adopted at the Twenty-eighth Consultative Meeting held at Stockholm 6 – 17 June 2005"(41).

Antarctic Specially Protected Area No. 147

Ablation Valley and Ganymede Heights, Alexander Island

Lat: 70°48'S; Long: 68°30'W

Ablation Valley-Ganymede Heights is situated on the east side of Alexander Island, the largest island off the western coast of Palmer Land, Antarctic Peninsula. The Area has a central west-east extent of about 10 kilometres and a north-south extent of about 1.8 kilometres, flanked to the west by the upper part of Jupiter Glacier, to the east by the permanent ice shelf in George VI Sound, to the north by Grotto Glacier and to the south by the lower reaches of Jupiter Glacier. Ablation Valley-Ganymede Heights contains the largest contiguous ice-free area in the Antarctic Peninsula sector of Antarctica.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 147 Management Plan, published at pages 226-228 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 - 29 May 2013"(42).

Antarctic Specially Protected Area No. 148

Mount Flora, Hope Bay, Antarctic Peninsula

Lat: 63°25'S; Long: 57°01'W

Mount Flora (0.3 square kilometres) is situated on the southeastern flank of Hope Bay, at the northern end of Trinity Peninsula, Antarctic Peninsula. The summit of Mount Flora (520 metres) is approximately 1 kilometre from the southern shore of Hope Bay. Four glaciers surround Mount Flora. The Flora Glacier extends from the cirque below the summit of Mount Flora in a northeasterly direction for one kilometre before it flows into a larger glacier that flanks the eastern and southern slopes of Mount Flora, extending northeast from The Pyramid (565 metres). The western slopes of Mount Flora are bounded by the Kenney Glacier, which joins Depot Glacier before flowing into the head of Hope Bay. The Pyramid is a distinctive peak 1.5 kilometres to the SSE of Mount Flora. To the north of the Area is the ice-free Five Lakes Valley and Scar Hills, and to the northeast is Lake Boeckella.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 148 Management Plan, published at pages 143-145 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01-10June 2015"(43).

Antarctic Specially Protected Area No. 149

Cape Shirreff and San Telmo Island, Livingston Island, South Shetland Islands Lat: 62°27'S; Long: 60°47'W

⁽⁴¹⁾ Cm 7166 (2007).

⁽⁴²⁾ Cm 8841 (2014).

⁽⁴³⁾ Cm 9356 (2016).

Cape Shirreff is situated on the northern coast of Livingston Island. The Area (9.7 square kilometres) comprises the entire Cape Shirreff peninsula north of the permanent Livingston Island ice cap, the San Telmo Island group and the surrounding and intervening marine area. The marine boundary encloses an area that extends 100 metres from, and parallel to, the outer coastline of the Cape Shirreff peninsula and the San Telmo island group.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 149 Management Plan, published at pages 128-130 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth consultative meeting held at Buenos Aires, 20 June – 1 July 2011" (44).

Antarctic Specially Protected Area No. 150

Ardley Island, Maxwell Bay, King George Island

Lat: 62°13'S; Long: 58°54'W

Ardley Island is located on the south-west coast of King George Island, nearly 500 metres east of the coast of Fildes Peninsula, Maxwell Bay. The island is about 2 kilometres long and 1.5 kilometres at its widest, and rises to about 65 metres altitude.

Geologically, it consists mainly of Tertiary andesitic and basaltic lavas and tuffs together with raised beach terraces. The topography is plain, with the highest elevation at 65 metres. The seabird community of Ardley Island is diverse and of exceptional biological interest.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 150 Management Plan, published at pages 188-190 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-second Consultative Meeting held at Baltimore 6 – 17 April 2009" (45).

Antarctic Specially Protected Area No. 151

Lions Rump, King George Island, South Shetland Islands

Lat: 62°08'S; Long: 58°07'W

The Area is located on the southern coast of King George Bay, King George Island, in the South Shetlands Islands. It is described as all the land and sea falling within the area bounded by the following co-ordinates:

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62°07′48″S, 58°09′17″W;
62°07′49″S, 58°07′14″W;
62°08′19″S, 58°07′19″W;
62°08′16″S, 58°09′15″W;
62°08′16″S, 58°09′15″W.
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The Area includes the littoral and sublittoral zones extending from the eastern end of Lajkonik Rock to the most northerly point of Twin Pinnacles. From this point the boundary extends to the easternmost end of the columnar plug of Lions Head to the east of White Eagle Glacier. On land, the Area includes the coast with raised beaches, freshwater pools and streams on the south side of King George Bay, around Lions Cove, and the moraines and slopes which lead to the lower ice tongue of White Eagle Glacier, then westward to a small moraine which protrudes through the ice cap southeast of Sukiennice Hills.

The location and boundaries of the Area are shown on Maps 1, 2, 3 and 4 of the Antarctic Specially Protected Area No. 151 Management Plan, published at pages 250-253 of the Command Paper "The

⁽⁴⁴⁾ Cm 8809 (2014).

⁽⁴⁵⁾ Cm 8048 (2011).

Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013"(46).

Antarctic Specially Protected Area No. 152

Western Bransfield Strait

Lat. 63°15'S to 63°30'S; Long: 62°00'W and 62°45'W

Bransfield Strait is a deep water passage approximately 220 kilometres long and 120 kilometres wide between the Antarctic Peninsula and the numerous islands that comprise the South Shetland Islands. The Drake Passage is to the north and to the west is the Bellingshausen Sea. The Area lies approximately 80 km west of the Antarctic Peninsula, mostly within the 200 metres isobath directly south and west of Low Island. Low Island is the southern-most of the South Shetland Islands, lying 60 kilometres south-west of Deception Island and 25 kilometres south-east of Smith Island. To the west and south of Low Island, and for approximately 20 kilometres from the shore, the sea floor slopes gently from the intertidal zone to depths of approximately 200 metres. The sea floor slopes steeply to the east of Low Island, reaching depths of up to 1200 metres in this part of Bransfield Strait.

The boundaries of the Area at Western Bransfield Strait are defined in the north as the line of latitude at 63°15′S and in the south at 63°30′S; in the east the boundary is defined as the line of longitude at 62°00′W and in the west 62°45′W. The northeastern boundary is defined as the shoreline of Low Island, extending from 62°00′W, 63°20′S in the southeast (approximately two kilometres from Cape Hooker) to 62°13′30″W, 63°15′S in the northwest (Cape Wallace). The coastline boundary on the western and southern shores of Low Island is defined as the high tide level, and the intertidal zone is included within the Area. The Area extends a maximum of 27.6 kilometres north-south and a maximum of 37.15 kilometres east-west, encompassing an area of approximately 916 square kilometres.

The location and boundaries of the Area are shown on Map 1 of the Antarctic Specially Protected Area No. 152 Management Plan, published at page 158 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 – 10 June 2015" (47).

Antarctic Specially Protected Area No. 153

Eastern Dallmann Bay

Lat: 64°10'S; Long: 62°50'W

Dallmann Bay (between latitudes 64°00′S and 64°20′S and from longitude 63°15′W eastward to the western shore of Brabant Island) is situated approximately 65 kilometres west of the Antarctic Peninsula, between Brabant Island and Anvers Island, with Bransfield Strait to the north and Gerlache Strait to the south. The designated Area is defined in the south by latitude 64°20′S, extending from Fleming Point westward for two kilometres to 62°40′W. From this location, the western boundary extends due north on longitude 62°40′W for 18.5 kilometres to 64°10′S, south south-west of Astrolabe Needle. The western boundary then extends north north-west almost 19 kilometres to 62°45′W, 64°00′S. The western boundary then extends approximately 13 kilometres due north on longitude 62°45′W to latitude 63°53′S, the northern boundary of the Area. The northern boundary extends along latitude 63°53′S from 62°45′W to 62°16′W, being a distance of approximately 23.4 kilometres. The eastern boundary extends due south approximately 16 kilometres from 62°16′W, 63°53′S to the eastern extremity of Pasteur Peninsula, Brabant Island, at 62°16′W, 64°02′S. From there, the eastern boundary is defined as the mean high water mark of the northern and western coastline of Brabant Island, which includes the intertidal zone within the Area.

⁽⁴⁶⁾ Cm 8841 (2014).

⁽⁴⁷⁾ Cm 9356 (2016).

The Area is 50 kilometres from north to south and extends up to a maximum of 23.4 kilometres eastwest. West of Brabant Island the width of the Area ranges between 10 kilometres (at Guyou Bay) and 1.5 kilometres (near Claude Point). The total area is approximately 610 square kilometres.

The location and boundaries of the Area are shown on Map 1 of the Antarctic Specially Protected Area No. 153 Management Plan, published at page 173 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 – 10 June 2015" (48).

Antarctic Specially Protected Area No. 154

Botany Bay, Cape Geology, Victoria Land

Lat: 77°00'S; Long: 162°33'E

Cape Geology is situated in the south-western corner of Granite Harbour, southern Victoria Land, at 77°00′14″S, 162°32′52″E approximately 100 kilometres north-west of Ross Island. The Area consists of raised boulder beach terraces, weathered rocky steppes and irregular rock platforms around Cape Geology, rising rapidly to the south to include a well-defined elevated cirque containing a small ice field.

The location and boundaries of the Area are shown on Maps A, B and C of the Antarctic Specially Protected Area No. 154 Management Plan, published at pages 276-278 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013" (49).

Antarctic Specially Protected Area No. 155

Cape Evans, Ross Island

Lat: 77°38'S; Long: 166°25'E

Cape Evans is a small, triangular shaped, ice-free area at the south west of Ross Island, 10 kilometres to the south of Cape Royds and 22 kilometres to the north of Hut Point Peninsula on Ross Island. The ice-free area is composed of till-covered basalt bedrock. The designated Area is located on the north western coast of Cape Evans adjacent to Home Beach and centred on Scott's Terra Nova hut. The boundaries of the ASPA are:

South: a line extending east from a point at 77°38′15.47″S, 166°25′9.48″E, 20 metres south of the cross on Wind Vane Hill;

South-west: a line from the reference point above extended to follow the crest of the small ridge descending in a north westerly direction to the shoreline at 77°38′ 11.50″S, 166°24′49.47″E;

North-west: by the shoreline of Home Beach;

North-east: by the line of the outlet stream from Skua Lake to Home Beach at 77°38′4.89″S, 166°25′13.46″E;

East: by the line extending south from the western edge of Skua Lake at 77°38′5.96″S, 166°25′35.74″E – to intersect with the southern boundary at 77°38′15.48″S, 166°25′35.68″E.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 155 Management Plan, published at pages 183-184 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 - 10 June 2015" (50).

⁽⁴⁸⁾ Cm 9356 (2016).

⁽⁴⁹⁾ Cm 8841 (2014).

⁽**50**) Cm 9356 (2016).

Antarctic Specially Protected Area No. 156

Lewis Bay, Mount Erebus, Ross Island

Lat: 77°25'S; Long. 167°28'E

The designated Area on the slopes of Mount Erebus encompasses the crash site, centred on 77°25′29″S, 167°28′30″E, at an elevation of 520 metres (1,720 feet). The Area includes the surrounding glacial ice 2 kilometres to either side of the crash site. The Area extends as a 4 kilometres wide 'rectangle' down to the sea, and includes the airspace above this region to an altitude of 1,000 metres (3,280 feet), with the exception of a 200 metres wide air access 'corridor' along the coastline.

The west boundary of the Area is the 167°23′33″E meridian; the east boundary of the Area is the 167°33′27″E meridian. The south boundary is the 77°26′33″S parallel, while the north boundary is defined by the coastline.

The location and boundaries of the Area are shown on Map A of the Antarctic Specially Protected Area No. 156 Management Plan, published at page 294 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013"(51).

Antarctic Specially Protected Area No. 157

Backdoor Bay, Cape Royds, Ross Island

Lat: 77°33'S; Long: 166°10'E

Cape Royds is an ice free area at the western extremity of Ross Island, approximately 40 kilometres to the south of Cape Bird and 35 kilometres to the north of Hut Point Peninsula on Ross Island. The ice free area is composed of till covered basalt bedrock. The designated Area is located to the north east of Cape Royds adjacent to Backdoor Bay. It is immediately to the east of ASPA 121, an Adélie penguin colony. The Area is centred on Shackleton's *Nimrod* Expedition hut.

The eastern and southern boundary consists of the shoreline of the eastern coast of Cape Royds from an unmarked point in Backdoor Bay (77°33′07.5″S, 166°10′32.6″E) to an unmarked point in Arrival Bay (77°33′15.8″S, 166°10′06.6″E).

The western boundary follows the boundary of ASPA 121 from the coastline at Arrival Bay (77°33′15.8″S, 166°10′06.6″E) 18 metres north-west to a signpost at the southern end of the penguin viewing area (77°33′15.2″S, 166°10′05.7″E), a further 74 metres to a signpost (77°33′12.9″S, 166°10′01.9″E) on the northern end of the penguin viewing area and a further 42 metres to a signpost (77°33′11.8″S, 166°09′59.0″E) east of Pony Lake.

The boundary then extends northwest from the signpost east of Pony Lake (77°33′11.8″S, 166°09′59.0″E) along a gully leading to an unmarked point (77°33′07.5″S, 166°10′12.9″E) adjacent to the New Zealand refuge hut.

The northern boundary extends due east from the New Zealand shelter (from the unmarked point at 77°33′07.5″S, 166°10′12.9″E) to the coastline of Backdoor Bay (77°33′07.5″S, 166°10′32.6″E).

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 157 Management Plan, published at pages 194-195 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 - 10 June 2015" (52).

Antarctic Specially Protected Areas No. 158

Hut Point, Ross Island

⁽⁵¹⁾ Cm 8841 (2014).

⁽**52**) Cm 9356 (2016).

Lat.77°50'S; Long. 166°37'E

The designated Area consists solely of the hut situated near the south-western extremity of Hut Point, which is a small ice-free area protruding south-west from the Hut Point Peninsula and situated to the west of the United States McMurdo Station. The hut was built in February 1902 during the *Discovery* Expedition of 1901-1904 led by Captain Robert Falcon Scott, and used in his 1910-1913 expedition.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 158 Management Plan, published at pages 203-204 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 - 10 June 2015" (53).

Antarctic Specially Protected Area No. 159

Cape Adare, Borchgrevink Coast

Lat: 71°18'S; Long: 170°09'E

Cape Adare is a generally ice free, prominent volcanic headland, at the northern extremity of Victoria Land, which marks the western approaches to the Ross Sea. The Area is located to the south west of the Cape on the southern shore of Ridley Beach, which encloses a large, flat, triangular area of shingle. It contains the huts built in February 1899 by the British Antarctic Expedition of 1898-1900 led by C E Borchgrevink and a hut built in 1911 for part of Scott's 1910-1913 expedition.

The boundaries of the ASPA are:

North, an east-west line drawn 50 metres north of the Northern Party Hut;

East, a north-south line drawn 50 metres to the east of Borchgrevink's stores hut. The north east corner of the boundary is 71°18.502′S, 170°11.735′E and the south east corner of the boundary is 71°18.633′S, 170°11.735′E;

West, a north-south line drawn 50 metres to the west of Borchgrevink's living hut. The north west corner of the boundary is 71°18.502'S, 170°11.547'E and the south west corner of the boundary is 71°18.591'S, 170°11.547'E; and

South, the high tide mark of Ridley Beach.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 159 Management Plan, published at pages 213-214 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 - 10 June 2015" (54).

Antarctic Specially Protected Area No. 160

Frazier Islands, Windmill Islands Group, Wilkes Land, East Antarctica

Lat: 66°14'S; Long: 110°10'E

The three Frazier islands (Nelly, Dewart and Charlton Island) lie in the eastern part of Vincennes Bay approximately 16 kilometres to the west-north-west of Casey Station in the Windmill Islands Group in East Antarctica. Nelly Island is the largest of three islands (approximately 0.35 square kilometres in area). The Area comprises the entire terrestrial area of the three islands, with the seaward boundary at the low water mark. The total area of the Frazier Islands ASPA is approximately 0.6 square kilometres. There are no boundary markers.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 160 Management Plan, published at pages 319-320 of the Command Paper "The

⁽⁵³⁾ Cm 9356 (2016).

⁽⁵⁴⁾ Cm 9356 (2016).

Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013"(55).

Antarctic Specially Protected Area No. 161

Terra Nova Bay, Ross Sea

Lat: 74°42'S; Long: 164°10'E

The Area is a coastal marine area situated in Terra Nova Bay, between the Campbell Glacier Tongue and Drygalski Ice Tongue, Victoria Land. The Area is confined to a narrow strip of coastal waters to the south of Terra Nova Bay Station, extending approximately 9.4 kilometres in length and generally within 1.5 to 1.7 kilometres of the shore, comprising an area of 29.4 square kilometres.

The western boundary of the Area is defined as the mean high water mark along the coastline extending between 74°42′57″S in the north (2.3 km south of MZS) and 74°48′00″S in the south (the southern shore of Adélie Cove), and includes the intertidal zone. The northern boundary of the Area is defined as the 74°42′57″S line of latitude, extending from the coast 1.55 kilometres eastward to the 164°10′00″E line of longitude. The boundary position may be recognised near the shore by the presence of a large and distinctive offshore rock in the northernmost cove on the coast south of MZS, which is an unique feature on this stretch of coast. The southern boundary is defined as the 74°48′00″S line of latitude, extending from the coast 3.63 kilometres eastward to the 164°10′00″E line of longitude. The boundary position may be recognised visually as being at the southern shore of the mouth of Adélie Cove, immediately south of a distinctive rocky outcrop at the base of the coastal cliffs. The eastern boundary of the Area is defined as the 164°10′00″E line of longitude extending between 74°42′57″S in the north and 74°48′00″S in the south.

The location and boundaries of the Area are shown on Map 1 of the Antarctic Specially Protected Area No. 161 Management Plan, published at page 343 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013"(56).

Antarctic Specially Protected Area No. 162

Mawson's Huts, Cape Denison, Commonwealth Bay, George V Land

Lat: 67°00'S; Long: 142°39'E

Cape Denison (Antarctic Specially Managed Area No. 3) is a 1.5 kilometre wide peninsula stretching into the centre of Commonwealth Bay. Its topography is defined by a series of four rocky ridges running south-east to north-north-west and three valleys filled with ice, snow and glacial moraine. The largest, most westerly of these valleys contains the four Australasian Antarctic Expedition huts known as Mawson's Huts. The Area covers four areas, each of which contains one timber hut and a five metre buffer zone extending from the perimeter of the hut. The huts are located at:

Main Hut 67°00′31″S, 142°39′39″E

Transit Hut 67°00′30″S, 142°39′42″E

Absolute Magnetic Hut 67°00′23″S, 142°39′48″E

Magnetograph House 67°00′21″S, 142°39′37″E

The location and boundaries of the Area are shown on Maps A, B and C of the Antarctic Specially Protected Area No. 162 Management Plan, published at pages 162-164 of the Command Paper "The

⁽⁵⁵⁾ Cm 8841 (2014).

⁽⁵⁶⁾ Cm 8841 (2014).

Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014"(57).

Antarctic Specially Protected Area No. 163

Dakshin Gangotri Glacier, Droning Maud Land

Lat: 70°44'S; Long: 11°33'30'"E (to 11°36'E)

The Dakshin Gangotri Glacier is a small tongue of polar continental ice sheet, overriding the Schirmacher Oasis. The Area is 4.53 square kilometres and comprises four distinct topographical units – the southern continental ice sheet; rocky hill slopes; a vast central proglacial lake (Lake B7, Sbrosovoye Lake); and northern undulatory shelf ice.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 163 Management Plan, published at pages 226-227 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 - 10 June 2015" (58).

Antarctic Specially Protected Area No. 164

Scullin and Murray Monoliths, Mac. Robertson Land, East Antarctica

Lat: 67°47'S; Long: 66°42'E (Scullin); Lat: 67°47'S; Long: 66°53'E (Murray)

Scullin Monolith (67°47′37″S, 66°43′8″E) and Murray Monolith (67°47′3″S, 66°53′17″E) are situated on the coast of Mac.Robbertson Land some 160 kilometres east of Mawson station. The monoliths are approximately seven kilometres apart and abut the sea at the edge of the continental ice sheet. The coastline to the west and east, and between the monoliths, consists of ice cliffs 30-40 metres high; the Antarctic plateau rises steeply from there to the south. Scullin Monolith is a crescent-shaped massif whose highest point is 443 metres above sea level. It encloses a broad north-facing cove with an entrance approximately one kilometre wide. All upper slopes of the monolith are precipitous, but in the lower 100 metres the slope eases in many parts and these areas are strewn with boulders and large stones. Elsewhere in the lower parts the rock face falls sheer to the sea, and there are some scree slopes.

The walls of Murray Monolith rise from the sea to a dome-shaped summit at 340 metres above sea level. On the western side of Murray Monolith, the lower slopes drop to a coastal platform. The Area extends over all ice-free areas associated with the two monoliths, and includes a portion of the adjacent continental ice and Torlyn Mountain to the south-west of Murray Monolith (which rises to about 400 metres above sea level). There are no boundary markers delimiting the site.

The Scullin and Murray Monoliths ASPA comprises two sectors:

Scullin Monolith: the boundary commences at a coordinate on the coastline at 67°46′59″S, 66°40′30″E, then in a southerly direction to a coordinate at 67°48′03″S, 66°40′26″E, east to a coordinate at 67°48′06″S, 66°44′33″E then north to a coordinate on the coast at 67°46′41″S, 66°44′37″E, then west following the coast line at the low tide mark to the coordinate 67°46′59″S, 66°40′30″E.

Murray Monolith: the boundary commences on the coastline at 67°46′36″S, 66°51′01″E, then continuous in a southerly direction to 67°48′03″S, 66°50′55″E, extends east to 67°48′05″S, 66°53′51″E, and north to 67°46′38″S, 66°54′00″E, then west following the coast line at the low tide mark to the coordinate 67°46′36″S, 66°51′01″E.

The location and boundaries of the Area are shown on Maps A, B, C and D of the Antarctic Specially Protected Area No. 164 Management Plan, published at pages 242-245 of the Command Paper "The

⁽⁵⁷⁾ Cm 9150 (2015).

⁽**58**) Cm 9356 (2016).

Antarctic Treaty: Measures adopted at the Thirty-eighth Consultative Meeting held at Sofia 01 - 10June 2015"(59).

Antarctic Specially Protected Area No. 165

Edmonson Point, Wood Bay, Ross Sea

Lat: 74°20'S; Long: 165°08'E

Edmonson Point (74°20'S, 165°08'E) is a coastal ice-free area of 1.79 square kilometres situated at Wood Bay, 50 kilometres north of Terra Nova Bay, and 13 kilometres east of the summit and at the foot of Mount Melbourne (2732 metres), Victoria Land. The Area comprises a total of 5.49 square kilometres, including the entire ice-free ground of Edmonson Point (1.79 square kilometres), the separate ice-free area of Colline Ippolito (Ippolito Hills) (1.12 square kilometres) approximately 1.5 kilometres north-west of Edmonson Point, and the nearshore marine environment and intervening sea of Baia Siena (Siena Bay) between these ice-free areas (2.58 square kilometres), which lie east and at the foot of the permanent ice sheet extending from Mount Melbourne. Part of the glacier from Mount Melbourne separates the two ice-free areas on land. A broad pebbly beach extends the length of the coastline of Edmonson Point, above which cliffs rise up to 128 metres towards the south of the Area.

The margin of the permanent ice sheet extending from Mount Melbourne is defined as the boundary in the west, north and south of the Area (Maps 1-3). The eastern boundary is marine, which in the southern half of the Area follows the coastline 200 metres offshore from the southern to northern extremities of the ice-free area of Edmonson Point. From the northern extremity of Edmonson Point, the eastern boundary extends north-west across Baia Siena for a distance of 2 kilometres to a position 200 metres due east from the coast of the northern extremity of Colline Ippolito. Baia Siena is thus enclosed within the Area. Boundary markers have not been installed because the ice sheet margin and the coast are obvious boundary references.

The location and boundaries of the Area are shown on Maps 1, 2, 3 and 4 of the Antarctic Specially Protected Area No. 165 Management Plan, published at pages 156-159 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth Consultative Meeting held at Buenos Aires, 20 June – 1 July 2011"(60).

Antarctic Specially Protected Area No. 166

Port-Martin, Terre-Adélie

Lat: 66°49'S; Long: 141°23'E

The Area comprises the Historic Site of Port-Martin (listed as Site Number 46 in Schedule 2) and the remaining ancillary buildings, including a shelter, weather shelter and coal and supply sheds, of the former French base at Port-Martin.

The location and boundaries of the Area are shown on the maps in Annexes A, B and C of the Antarctic Specially Protected Area No. 166 Management Plan, published at pages 149-151 of the Command Paper "The Antarctic Treaty: Measures adopted at the Twenty-ninth Consultative Meeting held at Edinburgh 12 – 23 June 2006"(61).

Antarctic Specially Protected Area No. 167

Hawker Island, Vestfold Hills, Ingrid Christensen Coast, Princess Elizabeth Land Lat: 68°38'S; Long: 77°51'E

⁽⁵⁹⁾ Cm 9356 (2016).

⁽⁶⁰⁾ Cm 8809 (2014).

⁽⁶¹⁾ Cm 7167 (2007).

Hawker Island, which lies some 300 metres off the Antarctic mainland, is located 7 kilometres southwest from the Australian Davis station in the Vestfold Hills. It supports a breeding colony of southern giant petrels on the coast of continental Antarctica. It also supports colonies of Adelie penguins and other birds

The Hawker Island ASPA comprises the entire terrestrial area of Hawker Island, with the seaward boundary at the low water mark. The total area of the Hawker Island ASPA is approximately 1.9 km². There are no boundary markers.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 167 Management Plan, published at pages 174-175 of the Command Paper "The Antarctic Treaty: Measures adopted at the thirty-fourth consultative meeting held at Buenos Aires, 20 June – 1 July 2011"(62).

Antarctic Specially Protected Area No. 168

Mount Harding, Grove Mountains, East Antarctica

Lat: 72°54'S; Long: 75°03'E

The Grove Mountains (72°20′-73°10′S, 73°50′-75°40′E) are located approximately 400 kilometres inland (south) of the Larsemann Hills in Princess Elizabeth Land, East Antarctica, on the eastern bank of the Lambert Rift. Mount Harding (72°51′-72°57′S, 74°53′-75°12′E) is the largest mount around Grove Mountains region, and located in the core area of the Grove Mountains that presents a ridge-valley physiognomies consisting of nunataks, trending NNE-SSW and is 200 metres above the surface of blue ice.

The Area is irregular, and approximately rectangular in shape, with a width of about 10km from east to west, a length of about 12km from south to north and an total area of about 120 square kilometres. The ASPA includes the open blue-ice zone from the moraine on the west side of Mount Harding to the east side of the Zakharoff Ridge as well as a number of nunataks, detritus zone, and moraine etc. within it. Its geographical coordinates are: 72°51′-72°57′S, 74°53′-75°12′E.

The western boundary of the Area is the moraine on the west side of Mount Harding, with its northern end turning eastward to the open blue-ice detritus zone on the east side of the Zakharoff Ridge via the north flank of the northern ridge of Mount Harding and the northern end of the Zakharoff Ridge, turning southwards to the northern end of Davey Nunataks, and then heading westwards to the southern end of the Xi Lake moraine to close the whole area. The geographical coordinates of the nine control points located at its boundary are counter clockwise: 1. 74°57′E, 72°51′S; 2. 74°54′E, 72°53′S; 3. 74°53′E, 72°55′S; 4. 74°54′E, 72°57′S; 5. 75°00′E, 72°57′S; 6. 75°10′E, 72°57′S; 7. 75°12′E, 72°55′S; 8. 75°11′E, 72°52′S; 9. 75°08′E, 72°51′S.

No markers or signs are currently in place to mark the boundary.

The location and boundaries of the Area are shown on Maps A1, A2, B and C of the Antarctic Specially Protected Area No. 168 Management Plan, published at pages 258-261 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-eighth consultative meeting held at Sofia 01 - 10 June 2015" (63).

Antarctic Specially Protected Area No. 169

Amanda Bay, Ingrid Christensen Coast, Princess Elizabeth Land, East Antarctica

Lat: 69°15'S; Long: 76°50'E

Amanda Bay lies south-west of the Brattstrand Cliffs, between the Vestfold Hills to the north-east and the Larsemann Hills to the south-west on the Ingrid Christensen Coast, Princess Elizabeth Land, East

⁽⁶²⁾ Cm 8809 (2014).

⁽⁶³⁾ Cm 9356 (2016).

Antarctica. Amanda Bay is approximately 3 kilometres wide and 6 kilometres long, and opens northwest into Prydz Bay. The south-west side of the bay is flanked by the Flatnes Ice Tongue secured by Cowell Island at its western corner. The southern and eastern sides are bounded by continental ice cliffs. There are small islets towards the centre of the bay and several un-named islands a few kilometres offshore.

The Amanda Bay ASPA comprises the rocks, islands and water, including fast ice, lying within an irregular area, covering the general area of Amanda Bay, commencing at a point to the north-east of Hovde Island at the terminus of the Hovde Glacier, 76°53′54.48″E, 69°13′25.77″S; then south along the coastline at the base of the Hovde Glacier ice cliffs, to a point at 76°53′44.17″E, 69°16′22.72″S; then west along the coastline at the base of a series of ice-free bluffs to a point 76°49′37.47″E, 69°16′58.48″S; then north along the base of the Flatnes Ice Tongue ice cliffs, to a point at the terminus of the Flatnes Ice Tongue, 76°46′41.07″E, 69°14′44.37″S; then a straight line in a north-easterly direction connecting with the originating point at 76°53′54.48″E, 69°13′25.77″S.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 169 Management Plan, published at pages 178-179 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014" (64).

Antarctic Specially Protected Area No. 170

Marion Nunataks, Charcot Island, Antarctic Peninsula

Lat: 69°45'S; Long: 75°15'W

Marion Nunataks lie on the northern edge of Charcot Island, a remote ice-covered island to the west of Alexander Island, Antarctic Peninsula, in the eastern Bellingshausen Sea. Marion Nunataks form a 12 kilometres chain of rock outcrops on the mid-north coast of the island and stretch from Mount Monique on the western end to Mount Martine on the eastern end. The Area is 106.5 square kilometres (maximum dimensions are 9.2 kilometres north-south and 17.0 kilometres east-west) and includes most, if not all, of the ice-free land on Charcot Island.

The Area boundary is defined as follows: the point on the northern coast of Charcot Island at 69°43′07″S, 75°00′00″W represents the most north-easterly point of the Area. From here, the Area boundary follows the coastline westwards to the point on the coast at 69°48′00″S, 75°19′19″W. The boundary then extends eastward inland to a point on the Charcot Island ice-cap at 69°48′00″S, 75°00′00″W. From there the boundary extends northwards to the coast at 69°43′07″S, 75°00′00″W. The Area also includes Cheeseman Island (located at Lat: 69°43′24″S, Long: 75°11′00″W).

There are no boundary markers delimiting the Area. The maximum dimensions of the Area are 9.2 kilometres north-south and 17.0 kilometres east-west (106.5 square kilometres). The Area includes ice cap that extends at least 4 kilometres to the south and east of Marion Nunataks, which is intended to act as a buffer zone to prevent accidental importation of species not native to the Area. The steep ice cliffs on the north coast of Charcot Island make access from the sea difficult.

The location and boundaries of the Area are shown on Maps 1, 2 and 3 of the Antarctic Specially Protected Area No. 170 Management Plan, published at pages 368-370 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013" (65).

Antarctic Specially Protected Area No. 171

Narębski Point, Barton Peninsula, King George Island Lat: 62°13'40"S to 62°14'23"S; Long: 58°45'25"W to 58°47'00"W

⁽⁶⁴⁾ Cm 9150 (2015).

⁽⁶⁵⁾ Cm 8841 (2014).

Narebski Point is located on the south-east coast of Barton Peninsula, King George Island. Boundaries are delimited by mountain peaks on the north and the east and coastline on the south-west. The south-west boundary can be easily recognized due to its distinguished geomorphology. The Area includes only the terrestrial area, excluding the intertidal zone. The total size of the Area is approximately 1 square kilometre.

The Area is rich in flora and fauna, of which the abundance of some species is exceptional. The cover of mosses and lichens is very extensive. There are large numbers of Chinstrap and Gentoo Penguins and the breeding areas of seven other birds including the nests of the Southern Giant Petrel. The high diversity in relief and coastal forms, due to the presence of different geologies and a prominent system of fractures, in addition to an extensive and varied vegetation cover, provides unusual scenic diversity in the Antarctic environment.

The location and boundaries of the Area are shown on Maps 1, 2, 3, 4, 5 and 6 of the Antarctic Specially Protected Area No. 171 Management Plan, published at pages 195-200 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014" (66).

Antarctic Specially Protected Area No. 172

Lower Taylor Glacier and Blood Falls, Taylor Valley, McMurdo Dry Valleys, Victoria Land Lat: 77°43.329'S; Long: 162°16.288'E

Blood Falls (located at Long: 162°16.288′E, Lat: 77°43.329′S) is an iron-rich, hypersaline discharge that emerges from a crevasse near the terminus of Taylor Glacier, in the McMurdo Dry Valleys, southern Victoria Land. The brine initially lacks colour, but freezes to a bubbly white icing as it flows off the glacier and then oxidises to produce its distinctive red-orange colour. Many traces of iron coloured material remain encapsulated in former crevasses and cracks in the glacier especially near the primary discharge point. A secondary, much smaller and less distinct, surface discharge has been observed twice (1958, 1976) approximately 40 meters north of Taylor Glacier at the margin of the Santa Fe stream delta (Long: 162°16.042′E, Lat: 77°43.297′S). The secondary discharge has a similar physical and chemical composition to the primary outlet at Blood Falls.

The primary reasons for designation of the Area are its unique physical properties, and the unusual microbial ecology and geochemistry. The Area is an important site for exobiological studies and provides a unique opportunity to sample the subglacial environment without direct contact. The influence of Blood Falls on adjacent Lake Bonney is also of significant scientific interest. Furthermore, the ablation zone of the Taylor Glacier is an important site for paleoclimatic and glaciological research. The lower Taylor Glacier subglacial brine reservoir and Blood Falls are globally unique and a site of outstanding scientific importance.

The location and boundaries of the Area are shown on Maps 1 and 2 of the Antarctic Specially Protected Area No. 172 Management Plan, published at pages 141 to 142 of Volume II of the Final Report of the Thirty-fifth Consultative Meeting of the Antarctic Treaty(67).

Antarctic Specially Protected Area No. 173

Cape Washington and Silverfish Bay, Terra Nova Bay, Ross Sea

Lat: 74°37.1'S; Long: 164°57.6'E

Cape Washington is situated in northern Terra Nova Bay, 40 kilometres east of Mario Zucchelli Station. The Area is 286 square kilometres, of which the marine component is 279.5 square kilometres (98%) and the terrestrial component is 6.5 square kilometres (2%).

⁽⁶⁶⁾ Cm 9150 (2015).

⁽⁶⁷⁾ Volume II of the Final Report of the Thirty-fifth Consultative Meeting of the Antarctic Treaty can be found at http://www.ats.aq/devAS/info_finalrep.aspx?lang=e&menu=2.

Sea ice persists in Silverfish Bay and across Closs Bay to Cape Washington from March until January, providing a stable and reliable platform on which the emperor penguins can breed and suitable conditions for the silverfish 'nursery'. The Cape Washington peninsula provides shelter to the emperor penguin colony, which is relatively protected from the strong katabatic winds that descend into other parts of Terra Nova Bay. The eastern coast of the Cape Washington peninsula comprises precipitous cliffs of several hundred meters in height, while the west side comprises more gentle mixed snow and ice-free slopes with some rocky outcrops extending down to sea level. Closs Bay extends uninterrupted across to the Campbell Glacier Tongue, punctuated by the solitary and small Markham Island close to Oscar Point.

The location and boundaries of the Area are shown on Maps 1, 2,3 and 4 of the Antarctic Specially Protected Area No. 173 Management Plan, published at pages 391-394 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-sixth Consultative Meeting held at Brussels, 20 – 29 May 2013" (68).

Antarctic Specially Protected Area No. 174

Stornes, Larsemann Hills, Princess Elizabeth Land

Lat: 69°25'S; Long: 76°6'E

Stornes (Lat: 69°25′S, Long: 76°6′E) lies within the Larsemann Hills, a coastal ice-free area in southern Prydz Bay, East Antarctica. Stornes is located between Thala Fjord and Wilcock Bay and is 21.13 square kilometres in area. The ASPA comprises the majority of Stornes, plus small unnamed promontories to the south-west. The Area does not have a marine component.

The Area boundary comprises the coastline (following the low tide mark) between a point on the western side of Thala Fjord at 76°8′29″E, 69°25′29″S to a point to the south of McCarthy Point at 76°3′22″E, 69°28′40″S. The remainder of the boundary largely follows the southern limit of rock outcrops between the aforementioned points. An indentation from the coast on the eastern side of the peninsula accommodates the potential need for vehicle landings and access to the inland and Broknes when ice conditions do not allow the use of preferred landings and routes elsewhere in the Larsemann Hills.

The location and boundaries of the Area are shown on Maps A and B of the Antarctic Specially Protected Area No. 174 Management Plan, published at pages 214-215 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014" (69).

Antarctic Specially Protected Area No. 175

High Altitude Geothermal Sites of the Ross Sea region

Lat: 77°31'S; Long: 167° 06'E

This ASPA consists of three sites including Tramway Ridge on the summit of Mount Erebus, three locations on the summit of Mount Melbourne and the summit of Mount Rittmann.

Tramway Ridge is a ridge that rises to approximately 3,450 metres above sea level on the northwest slope of the main crater of Mount Erebus. The site is located along this ridge approximately 1.5 kilometres from the main crater. It is the most extensive area of geothermally heated ground on the summit of Mount Erebus, though locations of geothermally heated ground are widespread at the summit.

The Mount Melbourne site consists of three separate locations, two on the main summit crater and a third on the northwest slope of the mountain. The first location, Cryptogam Ridge,

⁽⁶⁸⁾ Cm 8841 (2014).

⁽⁶⁹⁾ Cm 9150 (2015).

is a distinct crescent shaped ridge and consists of areas of snow-covered unheated ground, snow-free geothermally-heated ground and ice-hummocks covering steam emissions that extends approximately 40 metres in all directions from the ridge line. The second location (Geothermal Slope) on the south-eastern rim of the main summit crater of Mount Melbourne is adjacent to Cryptogam Ridge on a slope leading up the eastern rim of the summit crater. Geothermal activity is evident on the hill slope as crevasses and ice towers extending up the steep caldera rim, approximately 50 metres wide. The third location (Northwest Slope) is on the northwest slopes of the volcano approximately 1.5 kilometres northwest of from Cryptogam Ridge. Geothermal activity is evident as a northwest to southeast trending line of ice towers and small patches of bare ground along the edge of a steep cliff.

The Mount Rittmann site encompasses the entire exposed caldera of Mount Rittmann.

The location and boundaries of the Area are shown on Maps A, A1, A2, A2/1 and A3 of the Antarctic Specially Protected Area No. 174 Management Plan, published at pages 242-246 of the Command Paper "The Antarctic Treaty: Measures adopted at the Thirty-seventh Consultative Meeting held at Brasilia 28 April – 07 May 2014" (70)."

⁽⁷⁰⁾ Cm 9150 (2015).