

SCAR

SPECIAL COMMITTEE ON ANTARCTIC RESEARCH

BULLETIN

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NORWAY SOUTH AFRICA UNITED KINGDOM
UNION OF SOVIET SOCIALIST REPUBLICS
UNITED STATES OF AMERICA

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S.C.A.R. BULLETIN

No. 2, May 1959

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International Antarctic Analysis Centre

Australia has accepted the invitation of S.C.A.R. to establish an International Antarctic Analysis Centre in Melbourne. The Centre will be set up by the Australian Bureau of Meteorology as a laboratory for the analysis of the synoptic charts of the area of the southern hemisphere south of lat. 30° S.

2. It is hoped that the Analysis Centre will begin operations on a preliminary scale on 2 February 1959.

3. It is obvious that the success of the Analysis Centre will depend largely on communications. It is hoped to have reports from Antarctica, South America, South Africa and other stations south of lat. 30° S. available in Melbourne within six hours of the time of observation. The S.C.A.R. Working Group on Communications is examining this and related problems. It is anticipated that the Analysis Centre will, at first, make use of existing communication facilities, but it is obvious that this should be regarded as a temporary expedient. It is presumed that the Japanese station on the Antarctic continent will report on the "mother-daughter" network as formerly, until a new communication plan is evolved. However, if radio communication could be established with the Australian station "Wilkes" this would be of considerable advantage to the operation of the Analysis Centre.

4. Another important factor is that there should be adequate and competent analyst capacity. The Director of the Australian Bureau of Meteorology has emphasized to S.C.A.R. that Governments should actively collaborate by sending competent meteorologists to work in the Centre.

Membership of Working Groups

Antarctic cartography

Argentina	L. Picard, head of division of cartography, Instituto Antártico Argentino, Buenos Aires.
Australia	B. P. Lambert, Director of National Mapping, Department of National Development, Acton, Canberra.
Belgium	J. Loodts, c/o Comité special belge de la Recherche dans l'Antarctique, Administration de la Recherche Scientifique, Ministère de l'Instruction Publique, Residence Palace, Rue de la Loi 155, Bruxelles.
France	Ing. Gen. G. R. Laclavere, 30 Avenue Rapp, Paris 7.
Japan	Dr Kunihiro Sino, Chief, Topographic Division, Geographical Survey Institute, 7-1000, Kamimeguro, Meguro-ku, Tokyo.
New Zealand	R. G. Dick, Surveyor-General, Lands and Survey Dept., Wellington.
United Kingdom	Brigadier M. Hotine, Directorate of Overseas Surveys, Kingston Road, Tolworth, Surrey.

U.S.A.	G. D. Whitmore, Chief Topographic Division U.S. Geological Survey, Washington.
U.S.S.R.	B. V. Dubovskoy, Chief Aerophotographic Division of Sojuzmorproukt.

Antarctic radio communications

Argentina	Captain Enrique G. M. Grunwaldt, Cerrito 1248, Buenos Aires.
Australia	J. F. Ward, Postmaster General's Dept., Treasury Place, Melbourne.
Belgium	H. Vandeveldt, Comité special belge de la Recherche dans l'Antarctique, Administration de la Recherche Scientifique, Ministère de l'Instruction Publique, Residence Palace, Rue de la Loi 155, Bruxelles.
France	S. Emery, Comité National Français des Recherches Antarctiques, 13 rue de l'Université, Paris VII ^e .
Japan	Dr Yuichiro Aono, Vice-director of the Radio Research Laboratories, Ministry of Posts and Telecommunication, Kokubunji P.O., Kitatama-gun, Tokyo.
New Zealand	T. R. Clarkson, Superintending Engineer, Chief Engineers Office, Post and Telegraph Dept., Wellington.
South Africa	F. J. Hewitt, Director, National Telecommunications Research Laboratory, Pretoria.
United Kingdom	A. H. Sheffield, Colonial Office, Sanctuary Buildings, Gt. Smith Street, London, S.W. 1 (Chairman).
U.S.A.	John M. Jones, National Academy of Sciences, National Research Council, 2101 Constitution Avenue, Washington 25, D.C.
U.S.S.R.	A. M. Driatsky.
World Meteorological Organization	V. Sundaram, W.M.O. Secretariat, Avenue de la Paix, Campagne Rigot, Genève.

*Scientific stations in Antarctica, 1959**Argentina***Ellsworth**

Location: lat. 77° 43' S., long. 41° 07' W., 40 m. above sea level.

Site: on ice shelf. Method of supply, by sea.

Climate: Temperature, mean annual -15.1° C., max. 1.8° C., min. -55.6° C.

Wind, mean annual, 5 m./s., extreme 28 m./s.

Cloudiness, mean annual 6.1.

Facilities available: 17 buildings accommodating 29.

Electric power: 166 kW.

Tractors, etc.: 6 Sno-cats, 4 tractors, D-4, 5 Weasels.

Personnel: Leader, J. H. Suarez.

Scientists in charge of disciplines: A. Antinucci, physiology; J. C. L. Perez, biology; W. P. Johnson and A. R. Mankewicz, meteorology.

Total, 4 scientists, 16 technicians, 9 others.

Scientific programme: Auroral physics, biology, cosmic rays, geomagnetism, glaciology, ionosphere, meteorology—surface and upper atmosphere, physiology.

Decepción

Location: lat. 62° 59' S., long. 60° 43' W., 7 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -2.7°C ., max. 10°C ., min. -30°C .

Wind, mean annual 6 m./s.

Cloudiness, mean annual 6.8 oktas.

Precipitation, estimated annual water equivalent 407 mm.

Facilities available: 5 buildings, accommodating 20.

Electrical power: 30 kW.

Personnel: Leader, R. C. Castouina.

Total: 1 scientist, 10 technicians, 9 others.

Scientific programme: Auroral physics (visual observations only), biology, glaciology (snow measurements only), ionosphere, meteorology—surface and upper atmosphere, physiology, seismology, atmospheric electricity.

Almirante Brown

Location: lat. $64^{\circ} 53' \text{S}$., long. $62^{\circ} 53' \text{W}$., 7 m. above sea level.

Site: on rock. Method of resupply, by sea.

Climate: Temperature, mean annual -2.4°C ., max. 10°C ., min. -21.6°C .

Wind, mean annual 2 m./s.

Cloudiness, mean annual 6.4 oktas.

Precipitation, estimated annual water equivalent, 899 mm.

Facilities available: 3 buildings, accommodating 7.

Electrical power: 10 kW.

Personnel: Leader, L. J. Rodriguez Varela.

Scientist: J. P. Alvarez, physiology and biology.

Total: 1 scientist, 3 technicians, 3 others.

Scientific programme: Auroral physics (visual observations), biology, glaciology (snow measurements only), meteorology—surface and upper atmosphere, oceanography, physiology, air chemistry.

Teniente Camara

Location: lat. $62^{\circ} 36' \text{S}$., long. $59^{\circ} 54' \text{W}$., 22 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -2.4°C ., max. 9°C ., min. -30°C .

Wind, mean annual 4.7 m./s.

Cloudiness, mean annual 6.5 oktas.

Precipitation, estimated annual water equivalent, 780 mm.

Facilities available: 6 buildings accommodating 7.

Electrical power: 14 kW.

Personnel: Leader, E. D. Mignone.

Scientist in charge, A. Mosca, physiology and biology.

Total: 1 scientist, 3 technicians, 3 others.

Scientific programme: Auroral physics (visual observations only), bio'ogy, glaciology (snow measurements only), meteorology—surface, physiology, air chemistry.

Melchior

Location: lat. $64^{\circ} 20' \text{S}$., long. $62^{\circ} 59' \text{W}$., 8 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -3.4°C ., max. 9.2°C ., min. -29.6°C .

Wind, mean annual 3.3 m./s.

Cloudiness, mean annual 6.1 oktas.

Precipitation, estimated annual water equivalent 1180 mm.

Facilities available: 6 buildings, accommodating 9.

Electrical power: 12 kW.

Personnel: Leader, C. Beis.

Total: 1 scientist (physiology and biology), 4 technicians, 4 others.

Scientific programme: Auroral physics (visual observations), biology, glaciology (snow measurements only), meteorology—surface and pilot balloon observations, oceanography, physiology, air chemistry.

General Belgrano

Location: lat. 77° 58' S., long. 38° 48' W., 37 m. above sea level.

Site: on ice shelf. Method of supply, by sea.

Climate: Temperature, mean annual, -21.6° C., max. 3° C., min. -50.4° C.

Wind, mean annual 5.7 m./s.

Cloudiness, mean annual 4.6 oktas.

Facilities available: 4 buildings, accommodating 17.

Tractors, etc.: 3 Weasels.

Personnel: Leader, P. P. Arcondo.

Scientist in charge, J. L. Rojo (physiology).

Total: 1 scientist, 2 technicians, 14 others.

Scientific programme: Auroral physics (visual observations only), cartography, glaciology (snow measurements only), meteorology—surface and pilot balloon observations, physiology.

Esperanza

Location: lat. 62° 23' S., long. 56° 59' W., 7 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual 5.3° C., max. 14.6° C., min. -32.1° C.

Wind, mean annual 9 m./s.

Cloudiness, mean annual 6 oktas.

Facilities available: 6 buildings, accommodating 15.

Tractors, etc.: 1 Weasel.

Personnel: Leader, I. Carro.

Scientist-in-charge, P. Baeza (physiology and biology).

Total: 1 scientist, 2 technicians, 12 others.

Scientific programme: Auroral physics (visual observations only), biology, cartography, glaciology, meteorology—surface and pilot balloon observations, physiology, air chemistry.

General San Martin

Location: lat. 68° 08' S., long. 67° 08' W., 5 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Wind mean annual 4.8 m./s.

Precipitation, estimated annual water equivalent 433 mm.

Facilities available: 13 buildings, accommodating 11.

Tractors, etc.: 2 tractors, 1 Weasel.

Personnel: Leader, J. A. Tagliani.

Scientist-in-charge, C. Ramaciotti (physiology and biology).

Total: 1 scientist, 3 technicians, 7 others.

Scientific programme: Auroral physics (visual observations only), biology, cartography, meteorology—surface and pilot balloon observations, physiology.

Orcadas

Location: lat. 60° 45' S., long. 44° 43' W., 4 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -4.5° C., max. 12.2° C., min. -40.1° C.

Wind, mean annual, 5 m./s.

Cloudiness, mean annual 7.2 oktas.

Precipitation, estimated annual water equivalent, 409 mm.

Facilities available: 9 buildings, accommodating 11.

Electrical power: 17 kW.

Personnel: Leader, E. Filipich.

Scientist-in-charge, J. Lahan (biology and physiology).

Total: 1 scientist, 7 technicians, 3 others.

Scientific programme: Auroral physics, (visual observations only), biology, geomagnetism, glaciology (snow measurements only), meteorology—surface and pilot balloon observations, physiology.

Australia

Macquarie Island

Location: lat. $54^{\circ} 30' S.$, long. $158^{\circ} 57' E.$, 6 m. above sea level.

Site: on sandy isthmus. Method of supply, by sea.

Climate: Temperature, mean annual $4.5^{\circ} C.$, max. $11.5^{\circ} C.$, min. $-9^{\circ} C.$

Wind, mean annual 9.5 m./s., extreme 48.5 m./s.

Cloudiness, mean annual 82 per cent.

Precipitation, estimated annual water equivalent, 160 mm.

Facilities available: 41 buildings, accommodating 17.

Electrical power: 47 kW. including Radar (17 KNA), and spare unit of 15 kW.

Tractors: 1 D4 Caterpillar.

Personnel: Leader, T. R. Harwood.

Scientists in charge of disciplines: B. G. Bell, ionosonde; S. Csordas, biology;

J. Hollingsworth, geomagnetism, seismology, gravity; J. Munro, cosmic rays; P. R. H. Sulzberger, auroral physics.

Total: 4 scientists, 4 technicians, 4 weather observers, 5 others.

Scientific programme: Auroral physics, biology, cartography, cosmic rays, geomagnetism, gravity, ionosphere, meteorology—surface and upper atmosphere oceanography, seismology, ozone whistlers.

Mawson

Location: lat. $69^{\circ} 36' S.$, long. $62^{\circ} 53' E.$, 6 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual $-10^{\circ} C.$, max. $7^{\circ} C.$, min. $-30^{\circ} C.$

Wind, mean annual 11.5 m./s., extreme 50 m./s.

Cloudiness, mean annual estimated 55 per cent.

Precipitation, estimated annual water equivalent, 70 mm.

Facilities available: 29 buildings, accommodating 24.

Electrical power: 70 kW., spare 15 kW., and 6 emergency kW. units.

Aircraft: 2 Beaver.

Tractors, etc.: 3 D4 Caterpillar, 1 T.C.A. 20 Ferguson, 1 Sno-cat.

Personnel: Leader, J. M. Bechevaise.

Scientists in charge of disciplines: G. M. Budd, physiology; R. Dunlop, cosmic rays; M. Kirton, geomagnetism, seismology; D. J. Norris, auroral physics; B. H. Stinear, geology; F. van Hulssen, ionosonde; E. I. Widdows, meteorology.

Total: 6 scientists, 4 technicians, 2 pilots, 2 weather observers, 10 others.

Scientific programme: Auroral physics, biology, cartography, cosmic rays, geology, geomagnetism, glaciology, gravity, ionosphere, meteorology—surface and upper atmosphere, physiology, seismology.

An auroral observatory for all-sky camera parallactic photography, also used as a weather observation station, is located in lat. $67^{\circ} 28' S.$, long. $60^{\circ} 53' E.$, on the Taylor Glacier. It is manned during the winter from Mawson.

Davis

Location: lat. $68^{\circ} 34' S.$, long. $77^{\circ} 57' E.$, 12 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -9°C ., max. 6°C ., min. -32°C .

Wind, mean annual 5 m./s., extreme 45 m./s.

Cloudiness, estimated 65 per cent.

Precipitation, estimated annual water equivalent, 120 mm.

Facilities available: 13 buildings, accommodating 8.

Electrical power: 30 kW. and spare 15 kW. unit.

Tractors: 1 TCA 20 Ferguson.

Personnel: Leader, H. O. Steiger.

Total: 2 technicians, 4 weather observers, 2 others.

Scientific programme: Biology, glaciology, meteorology—surface and upper atmosphere.

Wilkes

Location: lat. $66^{\circ}15'S$., long. $110^{\circ}31'E$., 9 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -9°C ., max. 8°C ., min. -33°C .

Wind, mean annual 5 m./s., extreme 47.5 m./s.

Cloudiness, mean annual, estimated 65 per cent.

Facilities available: 18 buildings, accommodating 25.

Electrical power: 60 kW. and spare 60 kW.

Tractors, etc.: 1 D4 Caterpillar, 5 X955 Caterpillar, 2 trucks, 1 carry lift.

Personnel: Leader, W. R. J. Dingle.

Scientists in charge of disciplines: J. V. Denholm (chief), auroral physics; G. de la Harpe, ionosonde; H. L. Hansen, meteorology; R. L. Penney, biology; R. Underwood, geomagnetism, seismology.

Total: 5 scientists, 4 technicians, 3, weather observers, 5 others.

Scientific programme: Auroral physics, biology, geomagnetism, glaciology, gravity, ionosphere, meteorology—surface and upper atmosphere, oceanography, seismology.

Australia assumed responsibility for Wilkes station on 2 February 1959. Among the 1959 party are three Americans, a biologist and two meteorologists.

Lewis Islet

Location: lat. $66^{\circ}06'S$., long. $134^{\circ}22'E$., 27.5 m. above sea level.

Site: on rock. Method of supply, by sea.

Facilities available: 1 building, no accommodation.

Scientific programme: Meteorology—surface and upper atmosphere.

Belgium

Roi Baudouin

Location: lat. $70^{\circ}26'S$., long. $23^{\circ}19'E$., 50 m. above sea level.

Site: on ice shelf. Method of supply, by sea.

Facilities available: 3 large, several small huts, accommodating 22.

Electrical power: 30 kW.

Tractors, etc.: 3 Sno-cats, 1 Muskeg.

Personnel: Leader, F. Bastin.

Scientists in charge of disciplines: G. Verfaillie (chief) physicist; F. Bastin, meteorology; K. V. Blaiklock, topography; G. Dieterle, seismology; R. Ketelers, nuclear radiation; A. Kelecom, ionosphere; J. Maquet, topography; P. Sultens, nuclear radiation; T. Van Autenboer, geology; Van Decan, glaciology; A. Van der Schuren, atmospheric electricity.

Total: 10 scientists, 10 technicians, 2 others.

Scientific programme: Auroral physics, biology, cartography, cosmic rays, geology, geomagnetism, glaciology, gravity, ionosphere, meteorology—surface and upper atmosphere, seismic shooting traverses, seismology.

*France***Dumont d'Urville**

Location: lat. 66° 40' S., long. 140° 01' E., 40 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -10.9°C. , max. 6.1°C. , min. -29.5°C.

Wind, mean annual, 11.6 m./s., extreme 70 m./s.

Cloudiness, mean annual 4.66 oktas.

Facilities available: 14 buildings, accommodating 12.

Electrical power: 60 kW.

Aircraft: 2 helicopters during summer only.

Tractors, etc.: 2 Weasels.

Personnel: Leader, R. Merle.

Scientists: F. Lazarus (chief), R. Germain, B. Groznykh, G. Guir, Dr Digeon, J. M. Noel.

Total: 7 scientists, 5 technicians.

Scientific programme: Auroral physics, biology, geomagnetism, ionosphere, meteorology—surface and upper atmosphere, oceanography, seismology.

*Japan***Syowa**

Location: lat. 69° S., long. 39° 35' E., 14.5 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean average -10.1°C. , max. 7.4°C. , min. -36°C.

Wind, mean annual 7.1 m./s., extreme 32.9 m./s.

Cloudiness, mean annual 6.6.

Facilities available: 5 buildings, accommodating 15.

Electrical power: 25 kW.

Tractors, etc.: 6 Sno-cats, 1 tractor.

Personnel: Leader, M. Murayama.

Scientists in charge of disciplines: M. Murauchi (leader), geophysics; J. Nakamura, aeronomy; M. Osc, ionosphere; Z. Seino, meteorology.

Total: 5 scientists, 4 technicians, 2 others.

Scientific programme: Auroral physics, cosmic rays, geomagnetism, glaciology, ionosphere, meteorology—surface and upper air, physiology, seismic shooting traverse, seismology.

*New Zealand/U.S.A.***Hallett**

Location: lat. 72° 18' S., long. 170° 18' E., 5 m. above sea level.

Site: on gravel spit. Method of supply, by sea.

Climate: Temperature, mean annual -15.1°C. , max. 5.7°C. , min. -42.2°C.

Wind, mean annual 4.3 m./s., extreme 52 m./s.

Cloudiness, mean annual 6.1.

Facilities available: 12 buildings accommodating 16.

Personnel: Chief scientist, C. L. Roberts, Jr., meteorology.

Total: 5 scientists, 3 technicians, 7 others.

Scientific programme: Auroral physics, biology, geomagnetism, ionosphere, meteorology—surface and upper atmosphere, seismology.

*Norway***Norway Station**

Location: lat. 70° 30' S., long. 2° 52' W., 557 m. above sea level.

Site: Ice shelf. Method of supply, by sea and sledge (37 km. from sea).

Climate: Temperature, mean annual -16.4°C ., max. 2.3°C ., min. -44.6°C .

Wind, mean annual 7.4 m./s., extreme 42 m./s.

Facilities available: 2 large, several small huts, accommodating 9.

Electrical power: two 14 kW. dynamos.

Tractors, etc.: 1 Muskeg, 2 "Oliver" tractors.

Personnel: Scientists in charge of various disciplines: S. Helle (leader), geodesy, geomagnetism; T. Vinje, meteorology.

Total: 9 scientists, 5 technicians.

Scientific programme: Auroral physics, cartography, cosmic rays, geology, geomagnetism, glaciology, meteorology—surface and upper air, ozone measurements.

*South Africa***Gough Island**

Location: lat. 40° 19' S., long. 9° 51' W., height above sea level 7 m.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual 11.8°C ., max. 13.9°C ., min. 9.6°C .

Cloudiness, mean annual 6.6 oktas.

Precipitation, estimated annual water equivalent, 3225 mm.

Facilities available: 4 buildings, accommodating 9.

Electrical power, 2 kW.

Personnel: Leader J. Bonnema.

Total: 4 technicians, 5 others.

Scientific programme: Meteorology—surface and upper atmosphere, aurora (visual observations only).

Marion Island

Location: lat. 46° 53' S., long. 37° 52' E., height above sea level 26 m.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual 5.4°C ., max. 6.3°C ., min. 4.7°C .

Wind, mean annual 6.3 m./s., extreme 53.5 m./s.

Cloudiness, mean annual 6 oktas.

Precipitation, estimated annual water equivalent 2215 mm.

Facilities available: 12 buildings accommodating 11.

Electrical power: 27 kW.

Personnel: Scientist-in-charge, J. Myburgh (meteorology).

Total: 1 scientist, 5 technicians, 5 others.

Scientific programme: Aurora (visual observations only), meteorology—surface and upper atmosphere.

Tristan da Cunha

Location: lat. 37° 03' S., long. 12° 19' W., height above sea level 23 m.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual 14.5°C ., max. 16.8°C ., min. 12.3°C .

Wind, mean annual 61.2 m./s.

Cloudiness, mean annual 6 oktas.

Precipitation, estimated annual water equivalent, 1673 mm.

Facilities available: 4 buildings accommodating 2 families.

Electrical power available 5 kW.

Personnel: Leader N. Scheer.

Total: 2 technicians.

Scientific programme: Meteorology—surface and upper atmosphere (pilot balloons only).

United Kingdom

Port Lockroy (Base A)

Location: lat. $64^{\circ} 5' S.$, long. $63^{\circ} 31' W.$, 3 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual $-3^{\circ} C.$, max. $8^{\circ} C.$, min. $-25^{\circ} C.$

Wind, mean annual 5 m./s.

Cloudiness, 6.5 oktas.

Precipitation, estimated annual water equivalent, 393 mm.

Facilities available: 5 buildings, accommodating 5.

Electrical power: 7.5 kW., 2 units.

Personnel: Leader, H. A. D. Cameron.

Total: 2 scientists, 1 technician,

Scientific programme: Auroral physics, ionosphere, absorption and whistlers studies, glaciology, ornithology.

Deception Island (Base B)

Location: lat. $62^{\circ} 59' S.$, long. $60^{\circ} 34' W.$, 8 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual $-3.5^{\circ} C.$, max. $9^{\circ} C.$, min. $-5.5^{\circ} C.$

Wind, mean annual, 6.7 m./s.

Precipitation, estimated annual water equivalent, 433 mm.

Facilities available: 3 buildings, accommodating 6.

Electrical power, 6.5 kW., 2 units.

Personnel: Chief scientist, I. Jackson.

Total: 3 scientists.

Scientific programme: Auroral physics, meteorology—surface, glaciology, ornithology, micro-meteorology.

Hope Bay (Base D)

Location: lat. $63^{\circ} 24' S.$, long. $56^{\circ} 39' W.$, 82 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual $-6.5^{\circ} C.$, max. $11.5^{\circ} C.$, min. $-30.5^{\circ} C.$

Wind, mean annual 6 m./s.

Cloudiness, mean annual 5.7 oktas.

Facilities available: 1 building, accommodating 14.

Electrical power, 6.25 kW., 2 units.

Tractors, etc.: 1 Ransome M.G. 6.

Personnel: Leader, D. Mc. Calman.

Scientists in charge of disciplines: J. Ashley (chief), geophysics; J. C. Bibby geology; J. Hampton, physiology; R. M. Koerner, meteorology; D. Mc. Calman, survey.

Total: 12 scientists, 2 technicians.

Scientific programme: Auroral physics, biology, cartography, geology, geomagnetism, meteorology—surface, physiology, glaciology, ornithology.

Argentine Islands (Base F)

Location: lat. $65^{\circ} 15' S.$, long. $64^{\circ} 16' W.$, 11 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean average $-5^{\circ} C.$, max. $8^{\circ} C.$, min. $-39^{\circ} C.$

Wind, mean annual 7 m./s.

Cloudiness, 6.7 oktas.

Precipitation, estimated annual water equivalent, 433 mm.

Facilities available: 3 buildings, accommodating 6.

Electrical power: 6.5 kW., 2 units.

Personnel: Scientists in charge of disciplines: C. R. Horton (chief), geophysics; B. D. Giles, meteorology.

Total: 7 scientists, 2 technicians, 1 other.

Scientific programme: Auroral physics, geology, geomagnetism, meteorology—surface and upper atmosphere, oceanography, seismology, ozone measurement, radiation, glaciology, ornithology.

Admiralty Bay (Base G)

Location: lat. 62° 03' S., long. 58° 24' W., 88 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean average -4° C., max. 8° C., min. -27° C.

Wind, mean annual, 5.3 m./s.

Cloudiness, mean annual 6.4 oktas.

Precipitation, estimated annual water equivalent, 396 mm.

Facilities available: 2 buildings, accommodating 6.

Electrical power: 6.5 kW., 2 units.

Personnel: Scientists in charge of disciplines: J. Stansbury (chief), glaciology; R. Thompson, meteorology.

Total: 4 scientists, 2 technicians.

Scientific programme: Auroral physics, glaciology, meteorology—surface, ornithology.

Signy Island (Base H)

Location: lat. 60° 43' S., long. 45° 36' N., 7 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -4° C., max. 10.5° C., min. -34° C.

Wind, mean annual 7 m./s.

Cloudiness, mean annual 6.5 oktas.

Precipitation, estimated annual water equivalent 331 mm.

Facilities available: 2 buildings, accommodating 6.

Electrical power: 6.25 kW., 2 units.

Personnel: Scientists in charge of disciplines: P. Richards (chief), meteorology; O. Gorman, biology.

Total: 4 scientists, 2 technicians.

Scientific programme: Auroral physics, biology, meteorology—surface, glaciology, ornithology.

Detaile Island (Base W)

Location: lat. 66° 52' S., long. 66° 48' W., 7 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -5° C., max. 4° C., min. -25° C.

Wind, mean annual 7.7 m./s.

Cloudiness, mean annual 6.5 oktas.

Facilities available: 4 buildings, accommodating 9.

Electrical power: 6.25 kW., 2 units.

Personnel: Scientists in charge of disciplines: C. A. Murray (chief), survey; Barton, geology; Sunningham, physiology.

Total: 5 scientists, 3 technicians.

Scientific programme: Auroral physics, biology, cartography, geology, glaciology, physiology, ornithology.

Horseshoe Island (Base Y)

Location: lat. 67° 49' S., long. 67° 17' W., 9 m. above sea level.

Site: on rock. Method of supply, by sea.

Climate: Temperature, mean annual -3°C ., max. 7°C ., min. -29°C .

Cloudiness, mean annual 6.3 oktas.

Facilities available: 1 building, accommodating 5.

Electrical power: 6.25 kW., 2 units.

Personnel: Chief scientist: R. Perry, meteorology.

Total: 3 scientists, 2 technicians.

Scientific programme: Auroral physics, meteorology—surface, glaciology, ornithology.

Halley Bay (Base Z)

Location: lat. $75^{\circ} 31'$ S., long. $26^{\circ} 36'$ W., 35 m. above sea level.

Site: on ice shelf. Method of supply, by sea.

Climate: Temperature, mean annual -18°C ., max. 2°C ., min. -51°C .

Wind, mean annual 6.6 m./s., extreme 39 m./s.

Facilities available: 5 buildings, accommodating 20.

Electrical power: 27.5 kW., 2 units.

Tractors, etc.: 3 Ferguson diesel.

Personnel: Leader, G. R. Lush.

Scientists in charge of disciplines: M. J. Blackwell (chief), meteorology, geomagnetism, seismology, glaciology; M. A. Sheret, auroral physics.

Total: 8 scientists, 3 technicians, 1 other.

Scientific programme: Auroral physics, biology, geomagnetism, glaciology, meteorology—surface and upper atmosphere, physiology, seismology.

United States

Amundsen-Scott, South Pole

Location: lat. 90°S ., 2000 m. above sea level.

Site: on inland ice. Method of supply, by air.

Climate: Temperature, mean annual -50.3°C ., max. -14.7°C ., min. -74.5°C .

Wind mean annual 6.5 m./s., extreme 24 m./s.

Cloudiness, mean annual 4 oktas.

Facilities available: 12 buildings accommodating 18.

Electrical power: 90 kW.

Tractors, etc.: 2 Caterpillar D2, 2 Weasels.

Personnel: Scientists in charge of disciplines: J. W. Posey (leader) meteorology;

L. R. Bauhs, ionosphere and whistlers; E. J. Fremouw, aurora; N. S. Jacobs, seismology and geomagnetism.

Total: 8 scientists, 1 technician, 6 others.

Scientific programme: Auroral physics, geomagnetism, glaciology, ionosphere, meteorology—surface and upper air, seismology, whistlers.

Byrd

Location: lat. $79^{\circ} 59'$ S., long. $120^{\circ} 01'$ W., 1515 m. above sea level.

Site: on inland ice. Method of supply, by air.

Climate: Temperature, mean annual -28.5°C ., max. -4.4°C ., min. -63.2°C .

Wind, mean annual 8.5 m./s. extreme 42.3 m./s.

Cloudiness, mean annual 6 oktas.

Precipitation, estimated annual water equivalent, 14.1 mm.

Facilities available: 12 buildings accommodating 24.

Electrical power: 90 kW.

Tractors, etc.: 2 Caterpillar D-8, 1 Caterpillar D-4, 2 Weasels, 9 Sno-cats.

Personnel: Scientists in charge of disciplines: J. Perrit (chief), geology and glaciology; F. K. Chang, gravity and seismic shooting traverse; W. H. Chapman,

cartography; L. E. Davis, geomagnetism and seismology; H. A. Le Vaux, aurora; K. E. Marks, radio noise and whistlers; B. D. Weiss, meteorology; A. E. Woolam, ionosphere.

Total: 12 scientists, 3 technicians, 8 others.

Scientific programme: Auroral physics, cartography, geology, geomagnetism, glaciology, gravity, ionosphere, meteorology—surface and upper atmosphere, seismic shooting traverses, seismology, radio noise and whistlers.

McMurdo Sound, U.S. Naval Air Facility

Location: lat. $77^{\circ} 51' S.$, long. $166^{\circ} 37' E.$, 24 m. above sea level.

Site: volcanic ash. Method of supply, by sea, air and land.

Climate: Temperature, mean annual $-17^{\circ} C.$, max. $4.4^{\circ} C.$, min. $-49.4^{\circ} C.$

Wind, mean annual 6 m./s., extreme 43 m./s.

Cloudiness, mean annual 6.2 oktas.

Facilities available: 48 buildings accommodating 112.

Electrical power: 400 kW.

Aircraft, 1 DC-3, 1 Otter, 1 helicopter.

Tractors, etc.: Caterpillar, Weasel, Sno-cat, Pole-cat.

Personnel: Scientists in charge of disciplines: M. E. Pryor (chief), biology; J. H.

Dearborn, oceanography (summer only); C. Frankenfield, meteorology;

W. B. Hamilton, geology (summer only).

Total: 3 scientists.

Scientific programme: Biology, geology, meteorology—surface and upper atmosphere, oceanography.

Rockford

Location: lat. $79^{\circ} 35' S.$, long. $152^{\circ} 56' W.$

Site: on ice shelf. Method of supply, by air and tractor train.

Scientific programme: Meteorology—surface and upper atmosphere.

Opened in January for summer operations only in support of air operations.

Beardmore

Location: lat. $83^{\circ} 17' S.$, long. $175^{\circ} 45' E.$

Site: on ice shelf. Method of supply, by air.

Scientific programme: Meteorology—surface and upper atmosphere (summer only).

U.S.S.R.

Mirny

Location: lat. $66^{\circ} 33' S.$, long. $93^{\circ} E.$, 30 m. above sea level.

Site: on rock and ice. Method of supply, by sea.

Climate: Temperature, mean annual $-10.2^{\circ} C.$, max. $5^{\circ} C.$, min. $-40.3^{\circ} C.$

Wind, mean annual 11.9 m./s., extreme 46 m./s.

Cloudiness, mean annual 6.3 oktas.

Precipitation, estimated annual water equivalent, 250–300 mm.

Facilities available: 43 buildings, accommodating 14.

Electrical power: 600 kW.

Aircraft: 3 IL-12; 1 AN-2; 6 LI-2.

Tractors, etc.: 2 Weasel-type, 10 heavy Caterpillars, 10 S-80 and 10 S-100 tractors.

Personnel: Leader A. G. Dralkin.

Scientists in charge of disciplines: B. E. Brunelli, geophysics; B. A. Savel'yev, glaciology; V. I. Shlyakhov, aero-meteorology.

Total: 32 scientists, 10 technicians, 5 pilots, 48 others.

Scientific programme: Auroral physics, cosmic rays, geomagnetism, glaciology, gravity, ionosphere, meteorology—surface and upper atmosphere, seismic shooting traverses, seismology.

Vostok

Location: lat. $78^{\circ} 27' S.$, long. $106^{\circ} 52' E.$, 3420 m. above sea level.

Site: on inland ice. Method of supply, by land and air.

Climate: Temperature, mean annual $-55^{\circ} C.$, max. $-22.7^{\circ} C.$, min. $-87.4^{\circ} C.$

Wind, mean annual, 4.6 m./s.

Precipitation, estimated annual water equivalent, 100 mm.

Facilities available: 7 buildings, accommodating 5.

Electrical power: 24 kW.

Tractors etc.: 2 heavy Caterpillars.

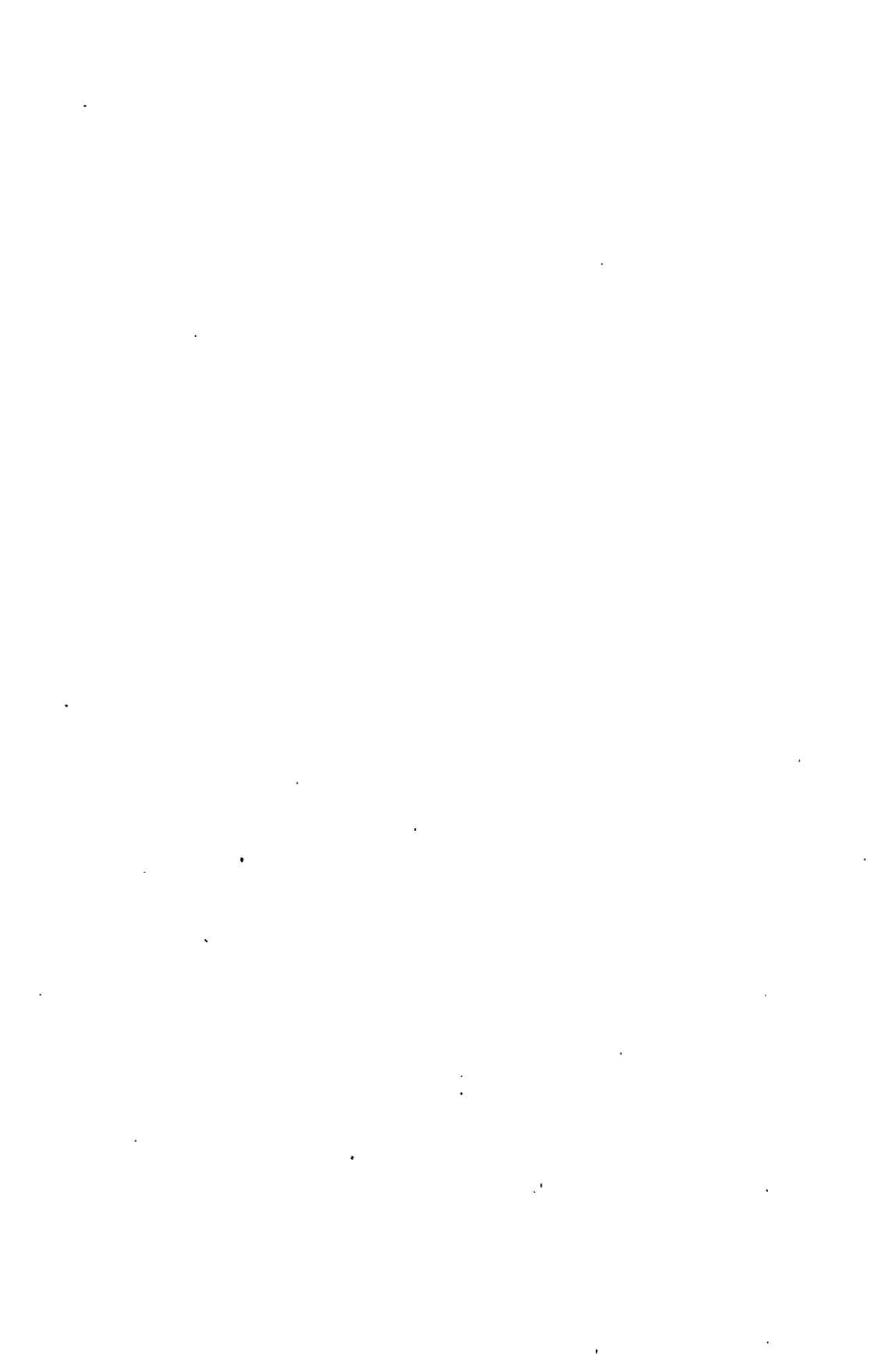
Personnel: Chief scientist, V. Ignatov.

Total: 3 scientists, 3 technicians, 4 others.

Scientific programme: Auroral physics, geomagnetism, glaciology, ionosphere, meteorology—surface and upper atmosphere, seismology, geography.

Lazarev

It is proposed to establish this station on the coast of Dronning Maud Land, between the Belgian and the Norwegian stations. Yu A. Kruchinin is to be in charge and the scientific programme is to comprise glaciology and meteorology—surface and upper atmosphere.



NOTICE

The SCAR Bulletin is published in England in January, May and September each year as part of the *Polar Record*, the journal of the Scott Polar Research Institute.

Contributions are invited, and should consist of factual notes on the membership, equipment and activities of Antarctic parties; articles on matters of particular interest in connection with these activities are also welcome. Contributions should be sent to the Editor, Scott Polar Research Institute, Lensfield Road, Cambridge, England.

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