11. Antarctica

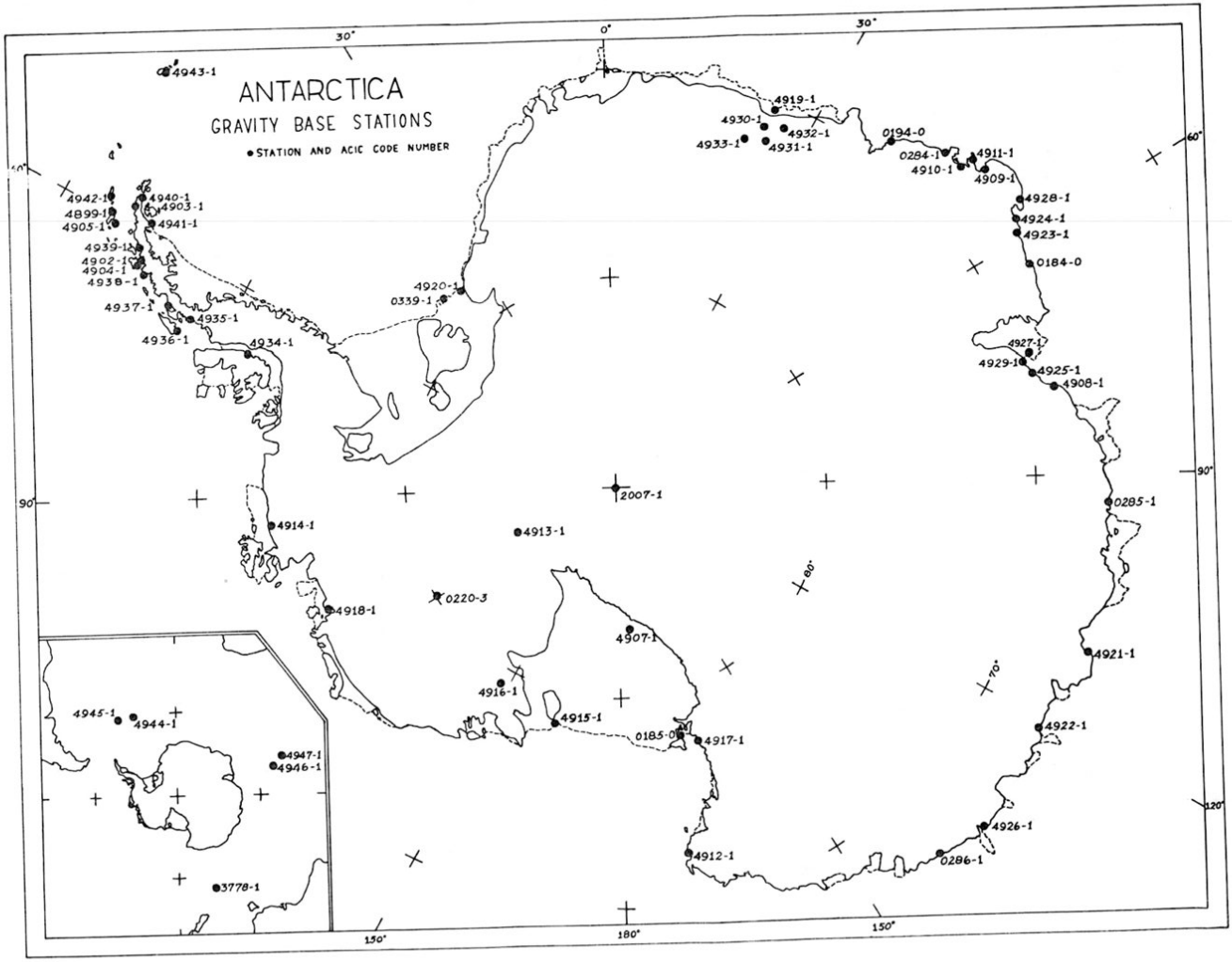
11.1 Introduction

The Antarctica section of this publication will include the continent of Antarctica and all the islands in close proximity to and surrounding the continent.

The adopted gravity values and estimated accuracies are relative to Potsdam (g = 981 274 mgal) and the scale was set by an interval on the American Calibration Line of 1228.48 mgals between Houston A and Great Falls A.

11.2 Gravity Base Stations

Antarctica


ANTARCTICA
GRAVITY BASE STATIONS
● STATION AND ACIC CODE NUMBER
30°
0°
30°
60°
90°
120°
150°
180°
150°
80°
70°
4943-1
4942-1
4940-1
4899-1
4903-1
4905-1
4941-1
4939-1
4902-1
4904-1
4938-1
4937-1
4935-1
4936-1
4934-1
4920-1
0339-1
4919-1
4930-1
4932-1
4933-1
4931-1
0194-0
0284-1
4911-1
4910-1
4909-1
4928-1
4924-1
4923-1
0184-0
4927-1
4929-1
4925-1
4908-1
2007-1
0285-1
4914-1
4913-1
4918-1
0220-3
4907-1
4921-1
4916-1
4915-1
0185-0
4917-1
4922-1
4926-1
4912-1
0286-1
4945-1
4944-1
4947-1
4946-1
3778-1

CROSS REFERENCE LIST
ANTARCTICA

STATION DESIGNATION	ACIC REF NO
ADELAIDE ISLAND	4936-1
ADMIRALTY BAY	4942-1
AMUNDSEN BAY	4909-1
BAMSEFJELL	4933-1
BASE GGV	4902-1
BASE O HIGGINS	4903-1
BASE PRAT	4899-1
BEARDMORE	4907-1
BYRD	0220-3
CAPE LONGING	4941-1
CASEY BAY	4910-1
CHICK ISLAND	4922-1
DAVIS	4908-1
DECEPTION ISLAND	4905-1
DETAILLE ISLAND	4937-1
ELLSWORTH	0339-1
ESPERANZA	4940-1
FOLDOYA	4923-1
FOSSIL BLUFF	4934-1
GALINDEZ ISLAND	4938-1
HALLETT	4912-1
HETTENE	4932-1
HORLICK MTS.	4913-1
JONES MTS.	4914-1
KING EDWARD VIII GULF	4924-1
LARSEMANN HILLS	4925-1
LEWIS ISLAND	4926-1
LITTLE AMERICA	4915-1
LITTLE ROCKFORD	4916-1
LORTON	4927-1
MAGNET BAY	4928-1
MARBLE POINT	4917-1
MAWSON	0184-0
MC MURDO	0185-0
MENIPA	4931-1
MIRNY	0285-1
MOLODJOSHNAJA	0284-1
MT CAROLINE MEKKELSEN	4929-1
MT MURPHY	4918-1
POINT GEOLOGIE	0286-1
PORT LOCKROY	4939-1
POI BAUDOUIN	4919-1
POMNAESFJELLET	4930-1
SHACKLETON	4920-1
SOUTH POLE	2007-1
STONINGTON ISLAND	4935-1
STYLES BAY	4911-1
SYOWA	0194-0
WILKES	4921-1
YELCHO	4904-1

CROSS REFERENCE LIST
ANTARCTICA
(SURROUNDING ISLANDS)

STATION DESIGNATION	ACIC REF NO
HEARD ISLAND HEARD ISLAND	4946-1
KERGUELEN ISLAND KERGUELEN ISLAND	4947-1
MACQUARIE ISLAND MACQUARIE ISLAND	3778-1
SOUTH GEORGIA ISLANDS KING EDWARD POINT	4945-1
SOUTH ORKNEY ISLAND SIGNY ISLAND	4943-1
SOUTH SANDWICH ISLAND ZAVODOVSKI ISLAND	4944-1

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
67° 36.3'S (1)	MAWSON
LONGITUDE	
62° 52.4'E (1)	
ELEVATION	**COUNTRY/STATE**
3.87 METERS (1)	Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 0184-0			
IGB 57072A		g= 982 480.87 mgals	
GW 120			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR Sept 1970

DESCRIPTION AND/OR SKETCH

The pendulum site is in the old emergency engine room (Concrete pier) attached to the No. 2 store. (1)

REFERENCE SOURCE

(1) 01412

GRAVITY BASE STATION

LATITUDE: 77° 53.11'S (1)	STATION DESIGNATION: McMURDO
LONGITUDE: 166° 45.30'E (1)	
ELEVATION: 12.09 METERS (1)	COUNTRY/STATE: Antarctica

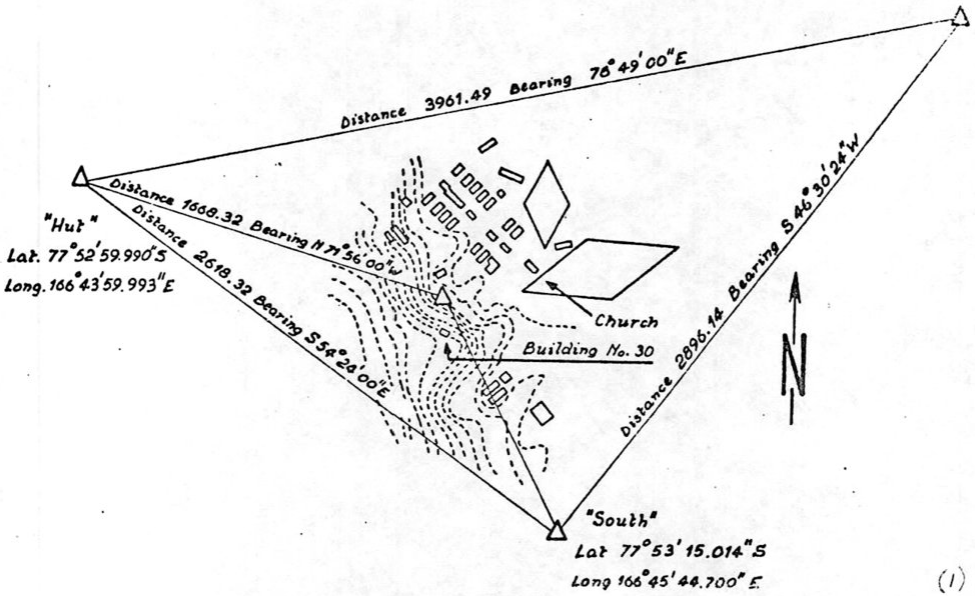
REFERENCE CODE NUMBERS	
ACIC 0185-0	
IGB 59676A	
GW 82	
NHO 60.00	

ADOPTED GRAVITY VALUE: g = 982 990.97 mgals

ESTIMATED ACCURACY	DATE
± 0.5 mgals	MONTH/YEAR: Sept 1970

DESCRIPTION AND/OR SKETCH

The site is on a concrete pier set in permafrost, beneath the floor of temporary building No. 30 now used as a GCA building. (1)



REFERENCE SOURCE

(1) 02632 (2) 01412

GRAVITY BASE STATION

LATITUDE: 69° 00.3'S (1)	STATION DESIGNATION: SYOWA
LONGITUDE: 39° 35.4'E (1)	
ELEVATION: 14.0 METERS (1)	COUNTRY/STATE: Antarctic

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 0194-0		g= 982 539.19 mgals	
		ESTIMATED ACCURACY	DATE
		± 2.0 mgals	MONTH/YEAR: June 1971

DESCRIPTION AND/OR SKETCH

On the exposed rock of granite-gneiss in the direction of N15°E at the distance of 20m from the entrance of Fujimino-ma (a simple frame hut). A metal mark has been fixed here. (1)

REFERENCE SOURCE

(1) 00714

402

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION: BYRD
LONGITUDE	
ELEVATION METERS	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 0220-3; WA 9019	ADOPTED GRAVITY VALUE: g= 982 604.47 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals; DATE MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

New Byrd Station, outside entrance to tower (Ruchio Building) about 4 inches below floor level. (1)

REFERENCE SOURCE

(1) 00916

ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
67° 39.8'S (1)	MOLODJOSHNAJA
LONGITUDE	
45° 50.9'E	
ELEVATION	**COUNTRY/STATE**
38.0 METERS (1)	Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 0284-1		g= 982 469.6 mgals	
		ESTIMATED ACCURACY	DATE
		± 0.3 mgals	MONTH/YEAR April 1968

DESCRIPTION AND/OR SKETCH

Station is located on a pier in a small cellar room, below the German wooden house, which is now used for gravimetric observations. (1)

REFERENCE SOURCE

(1) 12302

404

GRAVITY BASE STATION

LATITUDE: 66° 33.1'S (1)	STATION DESIGNATION: MIRNYY
LONGITUDE: 93° 00.7'E	
ELEVATION: 20.7 METERS (1)	COUNTRY/STATE: Antarctica

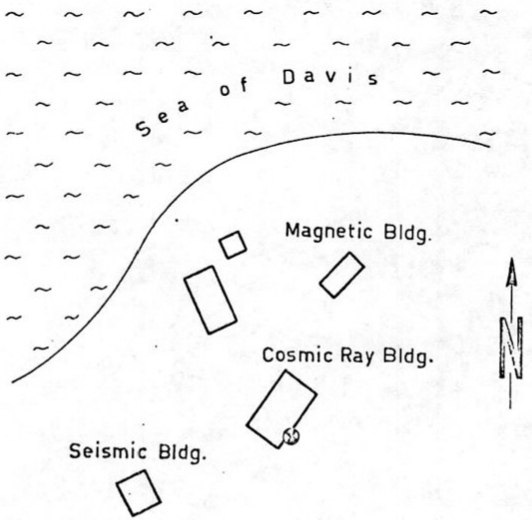
REFERENCE CODE NUMBERS	
ACIC 0285-1	
IGB 56763A	
GW 119	

ADOPTED GRAVITY VALUE: g = 982 404.27 mgals

ESTIMATED ACCURACY	DATE
± 0.5 mgals	MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Station is located inside the Cosmic Pavillon on the pier, where the ionisation-camera is erected. (1)



(1)

REFERENCE SOURCE

(1) 012302 (2) 01412

405

GRAVITY BASE STATION

LATITUDE: 66° 40.0'S (1)	STATION DESIGNATION: POINTE GEOLOGIE
LONGITUDE: 140° 00.7'E (1)	
ELEVATION: 11.0 METERS (1)	COUNTRY/STATE: Antarctica/Terre Adelie

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 0286-1		g= 982 402.71 mgals	
		ESTIMATED ACCURACY	DATE
		± 1.0 mgals	MONTH/YEAR: July 1971

DESCRIPTION AND/OR SKETCH

Petrel Island, 60 meters east from barracks of 1952-53; red cairn on the side; flat stone with the mark TA 1. (1)

REFERENCE SOURCE

(1) 02326

406

GRAVITY BASE STATION

LATITUDE: 77° 42.6'S (1)	STATION DESIGNATION: ELLSWORTH
LONGITUDE: 41° 08.0'W (1)	
ELEVATION: 42.1 METERS (1)	COUNTRY/STATE: Antarctica/Enderby Island

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 0339-1		g= 982 925.37 mgals	
NHO 60.02			
WA 9005			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR: Sept 1970

DESCRIPTION AND/OR SKETCH

Science Building Library, northwest corner of room. (1)

REFERENCE SOURCE

(1) 00916

GRAVITY BASE STATION

LATITUDE 90° S (1)	STATION DESIGNATION SOUTH POLE
LONGITUDE	
ELEVATION 2799.3 METERS(1)	COUNTRY/STATE Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 2007-1		g= 982 326.46 mgals	
WA 9014			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR August 1971

DESCRIPTION AND/OR SKETCH

One wooden boardwalk at corner of Byrd Boulevard and Waldron Avenue adjacent to the Science Building. (1)

REFERENCE SOURCE

(1) 00916

408

GRAVITY BASE STATION

LATITUDE: 54° 30.0'S (1)	STATION DESIGNATION: MACQUARIE
LONGITUDE: 158° 57.2'E (1)	
ELEVATION: 6 METERS (1)	COUNTRY/STATE: Macquarie Islands
REFERENCE CODE NUMBERS: ACIC 3778-1	ADOPTED GRAVITY VALUE: g= 981 695.04 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: Oct 1970

DESCRIPTION AND/OR SKETCH

In the center of the floor of the anemometer building in the ANARE comp. (1)

REFERENCE SOURCE

(1) 02320

404

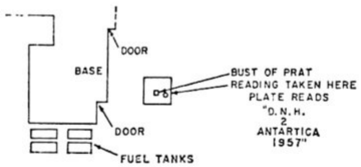
GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
62° 29'S (1)	BASE PRAT
LONGITUDE	
59° 38'W (1)	
ELEVATION	**COUNTRY/STATE**
2.0 METERS (1)	Antarctica

REFERENCE CODE NUMBERS	ADOPTED GRAVITY VALUE	
ACIC 4899-1	g= 982 229.32 mgals	
	ESTIMATED ACCURACY	DATE
	± 0.4 mgals	MONTH/YEAR Nov 1971

DESCRIPTION AND/OR SKETCH

Base Prat, Greenwich Island, South Shetland Islands. Reading taken on marker embedded in concrete platform upon which rests bust of Prat. (1)



(1)

REFERENCE SOURCE

(1) 00684

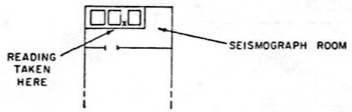
410

GRAVITY BASE STATION

LATITUDE: 64° 49'S (1)	STATION DESIGNATION: BASE GGV (GABRIEL GONZALEZ VIDELA)
LONGITUDE: 62° 52'W (1)	
ELEVATION: 3.0 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4902-1	ADOPTED GRAVITY VALUE: g= 982 305.62 mgals
	ESTIMATED ACCURACY: ± 0.4 mgals
	DATE — MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

Reading taken in Scientific Building on seismograph platform. (1)



(1)

REFERENCE SOURCE

(1) 00684

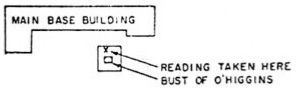
411

GRAVITY BASE STATION

LATITUDE: 63° 19'S (1)	STATION DESIGNATION: BASE O'HIGGINS
LONGITUDE: 57° 54'W (1)	
ELEVATION: 10.0 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4903-1	ADOPTED GRAVITY VALUE: g = 982 241.92 mgals
	ESTIMATED ACCURACY: ± 0.4 mgals
	DATE — MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

Reading taken on concrete platform upon which rests bust of O'Higgins. (1)



(1)

REFERENCE SOURCE

(1) 00684

412

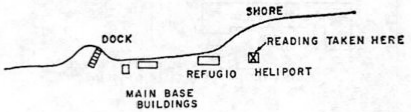
ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE: 64° 53'S (1)	STATION DESIGNATION: YELCHO
LONGITUDE: 63° 35'W (1)	COUNTRY/STATE: Antarctica
ELEVATION: 3.5 METERS (1)	ADOPTED GRAVITY VALUE: g= 982 314.82 mgals
REFERENCE CODE NUMBERS: ACIC 4904-1	ESTIMATED ACCURACY: ± 0.4 mgals
	DATE — MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

Reading taken on the northwest corner of the concrete slab composing the heliport, 45-55 meters east of the refuge and 70 meters east of the main base building. (1)



(1)

REFERENCE SOURCE

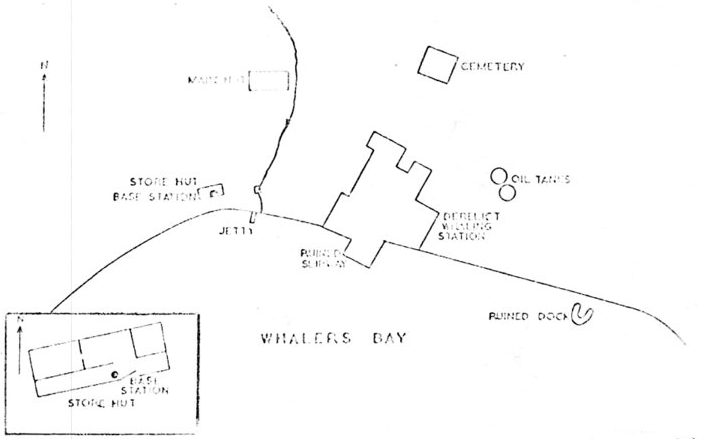
(1) 00684

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
62° 58.9'S (1)	DECEPTION ISLAND
LONGITUDE	
60° 34.1'W (1)	
ELEVATION	**COUNTRY/STATE**
METERS	South Shetland Islands
REFERENCE CODE NUMBERS	**ADOPTED GRAVITY VALUE**
ACIC 4905-1	g = 982 217.64 mgals
	ESTIMATED ACCURACY / **DATE**
	± 1.0 mgals / MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

The station is on the concrete floor, 2 feet (0.6m) down from the door, inside the old boat shed, which is now used as a store. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

(1) 02329

414

GRAVITY BASE STATION

LATITUDE: 83° 21.7'S (1)	STATION DESIGNATION: BEARDMORE
LONGITUDE: 174° 52.5'E (1)	
ELEVATION: 57.0 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4907-1		g= 983 117.16 mgals	
WA 9002		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

(November 11, 1957), 10 feet from the end of a quonsit hut, 7 feet from the side of a second quonsit hut. The antenna farm is on the opposite side of the second quonsit hut. (1)

REFERENCE SOURCE

(1) 00916

GRAVITY BASE STATION

LATITUDE 68° 34.7'S (1)	STATION DESIGNATION DAVIS
LONGITUDE 77° 57.6'E (1)	
ELEVATION 7.0 METERS (1)	COUNTRY/STATE Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4908-1		g= 982 589.27 mgals	
WA 9016			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR Nov 1971

DESCRIPTION AND/OR SKETCH

By "X" mark on rock, one foot from low cairns, 115 feet from corner of generator house toward bay. (1)

REFERENCE SOURCE

(1) 00916

416

GRAVITY BASE STATION

LATITUDE: 66° 47'S (1)	STATION DESIGNATION: AMUNDSEN BAY
LONGITUDE: 50° 34'E (1)	
ELEVATION: 4.6 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4909-1; WA 9020	ADOPTED GRAVITY VALUE: g= 982 441.47 mgals
ESTIMATED ACCURACY: ± 0.5 mgals	DATE — MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

At mouth of Adams Fjord on rock outcrop at small cairn, on side of rock and ice steep slope by first rock on left after ice while heading into fjord entrance. (1)

REFERENCE SOURCE

(1) 00916

417

GRAVITY BASE STATION

LATITUDE: 67° 17'S (1)	STATION DESIGNATION: CASEY BAY
LONGITUDE: 46° 59'E (1)	
ELEVATION: 1.8 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS	
ACIC 4910-1	
WA 9021	

ADOPTED GRAVITY VALUE: g = 982 501.77 mgals

ESTIMATED ACCURACY	DATE
± 0.5 mgals	MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

On rock outcrop near shore near old astroposition below low summit. (1)

REFERENCE SOURCE

(1) 00916

418

GRAVITY BASE STATION

LATITUDE: 67° 38'S (1)	STATION DESIGNATION: STYLES BAY
LONGITUDE: 45° 50'E (1)	
ELEVATION: 25.0 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4911-1; WA 9022	ADOPTED GRAVITY VALUE: g= 982 467.47 mgals
ESTIMATED ACCURACY: ± 0.5 mgals	DATE — MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

On pink granite on peak of small promontory, 200 yards from shore. (1)

REFERENCE SOURCE

(1) 00916

GRAVITY BASE STATION

LATITUDE 72° 18'S (1)	STATION DESIGNATION HALLETT
LONGITUDE 170° 18'E (1)	
ELEVATION METERS	COUNTRY/STATE Antarctica
REFERENCE CODE NUMBERS ACIC 4912-1 WA 9006	ADOPTED GRAVITY VALUE g= 982 703.97 mgals
ESTIMATED ACCURACY ± 0.5 mgals	DATE MONTH/YEAR Nov 1971

DESCRIPTION AND/OR SKETCH

Entrance to Magnetic Observatory. (1)

REFERENCE SOURCE

(1) 00916

420

ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE: 84° 50'S (1)	STATION DESIGNATION: HORLICK MTS.
LONGITUDE: 116° 33'W (1)	
ELEVATION: 2025 (± 90) METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4913-1		g= 982 606.36 mgals	
WU 9004			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

At Ohio State University Camp; estimated three miles from Jamesway on heading 160° grid. (1)

REFERENCE SOURCE

(1) 00916

ACIC HQ FORM FEB 69 O-415

GRAVITY BASE STATION

LATITUDE: 73° 29'S (1)	STATION DESIGNATION: JONES MTS.
LONGITUDE: 94° 25'W (1)	
ELEVATION: 557.8 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4914-1		g= 982 647.67 mgals	
WU 9003		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

Camp Minnesota, 200 feet from front door of Jamesway but towards basalt promontory. Station flagged black-red-black. Cardboard marks surface level of 10 Dec 1960. (1)

REFERENCE SOURCE

(1) 00916

422

GRAVITY BASE STATION

LATITUDE: 78° 11.0'S (1)	STATION DESIGNATION: LITTLE AMERICA
LONGITUDE: 162° 10.0'W (1)	
ELEVATION: 43.0 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4915-1		g= 982 980.67 mgals	
WU 9001			
NHO 60.04			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

On gravity pier in Building 12. (1)

REFERENCE SOURCE

(1) 00916

GRAVITY BASE STATION

LATITUDE: 79° 14.8'S (1)	STATION DESIGNATION: LITTLE ROCKFORD
LONGITUDE: 147° 29.0'W (1)	
ELEVATION: 591 ± 9 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4916-1; WA 9018	ADOPTED GRAVITY VALUE: g= 982 858.37 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

On bottom step at entrance to Operations Building. (1)

REFERENCE SOURCE

(1) 00916

424

GRAVITY BASE STATION

LATITUDE: 77° 24.9'S (1)	STATION DESIGNATION: MARBLE POINT
LONGITUDE: 163° 42.0'E (1)	
ELEVATION: 68.9 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS	
ACIC 4917-1	
WA 9008	
NHO 60.01	

ADOPTED GRAVITY VALUE

g = 982 950.16 mgals

ESTIMATED ACCURACY	DATE
± 0.5 mgals	MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

Benchmark JAYB (iron rod set in concrete) at summit of hill approximately 3,936 feet east of ice cliff, 1,968 feet east of camp site, 984 feet from coast. The hill, composed of coarse-grained marble, is highest hill between ice cliff and bay. (1)

REFERENCE SOURCE

(1) 00916

GRAVITY BASE STATION

LATITUDE: 75° 35'S (1)	STATION DESIGNATION: MT. MURPHY
LONGITUDE: 111° 45'W (1)	
ELEVATION: 749.8 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4918-1		g= 982 673.77 mgals	
WU 9005			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

Camp of Stanford University, VLF. Radio Noise Traverse. (1)

REFERENCE SOURCE

(1) 00916

426

GRAVITY BASE STATION

LATITUDE: 70° 25.9'S (1)	STATION DESIGNATION: ROI BAUDOUIN
LONGITUDE: 24° 18.6'E (1)	
ELEVATION: 38.1 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4919-1		g= 982 779.66 mgals	
WA 9009		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

Science Building, Ionosphere Lab, next to work bench midway between ionosphere sounder and clock. (1)

REFERENCE SOURCE

(1) 00916

GRAVITY BASE STATION

LATITUDE 77° 57.0'S (1)	STATION DESIGNATION SHACKLETON
LONGITUDE 37° 16.0'W (1)	
ELEVATION 57.9 METERS (1)	COUNTRY/STATE Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4920-1		g= 982 935.37 mgals	
WA 9012			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR Nov 1971

DESCRIPTION AND/OR SKETCH

At base of metal meteorology tower. (1)

REFERENCE SOURCE

(1) 00916

428

GRAVITY BASE STATION

LATITUDE: 66° 15.0'S (1)	STATION DESIGNATION: WILKES
LONGITUDE: 110° 31.0'E (1)	
ELEVATION: 10.1 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4921-1; WU 9002	ADOPTED GRAVITY VALUE: g= 982 398.66 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: Nov 1971

DESCRIPTION AND/OR SKETCH

Between the Seismograph Building and the Geomagnetics Building, three feet from the wall of the Seismograph Building. (1)

REFERENCE SOURCE

(1) 00916

ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
66° 47.30'S (1)	CHICK IS.
LONGITUDE	
120° 59.67'E (1)	
ELEVATION	**COUNTRY/STATE**
9.8 METERS (1)	Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4922-1		g= 982 440.7 mgals	
		ESTIMATED ACCURACY	DATE
		± 2.0 mgals	MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

The gravity station is on rock, 3 feet 6 inches below the floor of the hut and at the northwest corner of the hut. The station is approximately 20 feet from Astrofix NMA/550. (1)

REFERENCE SOURCE

(1) 01591

430

GRAVITY BASE STATION

LATITUDE: 67° 20'S (1)	STATION DESIGNATION: FOLDOYA
LONGITUDE: 59° 23'E (1)	COUNTRY/STATE: Antarctica
ELEVATION: 4.6 METERS (1)	ADOPTED GRAVITY VALUE: g= 982 479.3 mgals
REFERENCE CODE NUMBERS: ACIC 4923-1	ESTIMATED ACCURACY: ± 2.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

The gravity station is in a right-angle bend of rocks behind the old camp. It is marked by a red cross with an arrow (visible from the air) pointing to it. (1)

REFERENCE SOURCE

(1) 01591

431

ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE: 66° 54'S (1)	STATION DESIGNATION: KING EDWARD VIII GULF
LONGITUDE: 57° 42'E (1)	
ELEVATION: .6 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4924-1		g= 982 477.8 mgals	
		ESTIMATED ACCURACY	DATE
		± 2.0 mgals	MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

The gravity station is at the site of an old depot. It is marked by a red cross on a rock with a prominent arrow indicating its position. (1)

REFERENCE SOURCE

(1) 01591

432

ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE: 69° 23.45'S (1)	STATION DESIGNATION: LARSEMANN HILLS
LONGITUDE: 76°13.32'E (1)	COUNTRY/STATE: Antarctica
ELEVATION: 1.5 METERS (1)	ADOPTED GRAVITY VALUE: g= 982 593.4 mgals
REFERENCE CODE NUMBERS: ACIC 4925-1	ESTIMATED ACCURACY: ± 2.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

The gravity station is at a cairn marking the Fisher Astrofix. (1)

REFERENCE SOURCE

(1) 01591

433

GRAVITY BASE STATION

LATITUDE: 66° 06'S (1)	STATION DESIGNATION: LEWIS IS.
LONGITUDE: 134° 22'E (1)	
ELEVATION: 18.3 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4926-1	ADOPTED GRAVITY VALUE: g= 982 346.3 mgals
	ESTIMATED ACCURACY: ± 2.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

The station is marked by an eye-bolt set in rock approximately 225 feet west-northwest of a cairn on the highest point on the islet. (1)

REFERENCE SOURCE

(1) 01591

434

GRAVITY BASE STATION

LATITUDE: 69° 21.62'S (1)	STATION DESIGNATION: LORTON
LONGITUDE: 73° 39.32'E (1)	COUNTRY/STATE: Antarctica
ELEVATION: .3 METERS (1)	ADOPTED GRAVITY VALUE: g= 982 600.0 mgals
REFERENCE CODE NUMBERS: ACIC 4927-1	ESTIMATED ACCURACY: ± 2.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

The gravity station is on the low-lying part of the southern shore. (1)

REFERENCE SOURCE

(1) 01591

435

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
66° 23.0'S (1)	MAGNET BAY
LONGITUDE	
56° 25.4'E (1)	
ELEVATION	**COUNTRY/STATE**
4.6 METERS (1)	Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4928-1		g= 982 428.6 mgals	
		ESTIMATED ACCURACY	DATE
		± 2.0 mgals	MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

The gravity station is on ice beneath a red arrow painted on rock with the inscription "20 feet beneath". (1)

REFERENCE SOURCE

(1) 01591

436

GRAVITY BASE STATION

LATITUDE: 69° 44.1'S (1)	STATION DESIGNATION: MT. CAROLINE MEKKELSEN
LONGITUDE: 74° 18'E (1)	
ELEVATION: 1.2 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4929-1	ADOPTED GRAVITY VALUE: g= 982 629.4 mgals
	ESTIMATED ACCURACY: ± 2.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

The gravity station is on the east side of a small rock about one mile due north of Mt. Caroline Mekkelsen, and is marked by a silver point cross. (1)

REFERENCE SOURCE

(1) 01591

437

ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE: 71° 28.0'S (1)	STATION DESIGNATION: ROMNAESFJELLET
LONGITUDE: 23° 58'E (1)	
ELEVATION: 1020 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4930-1	ADOPTED GRAVITY VALUE: g= 982 397.55 mgals
	ESTIMATED ACCURACY: ± 0.7 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Large boulder near snow-rock contact to the southeast of the summit. (1)

REFERENCE SOURCE

(1) 02764

438

GRAVITY BASE STATION

LATITUDE: 71° 53.43'S (1)	STATION DESIGNATION: MENIPA
LONGITUDE: 24° 59.52'E (1)	
ELEVATION: 1143.1 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4931-1	ADOPTED GRAVITY VALUE: g= 982 338.92 mgals
	ESTIMATED ACCURACY: ± 0.7 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Cairn on summit of small nunatak forming the extremity of Menipa. (1)

REFERENCE SOURCE

(1) 02764

ACIC HQ FORM FEB 69 O-415

GRAVITY BASE STATION

LATITUDE: 71° 04'S (1)	STATION DESIGNATION: HETTENE
LONGITUDE: 26° 33'E (1)	
ELEVATION: 1024 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4932-1	ADOPTED GRAVITY VALUE: g= 982 389.38 mgals
	ESTIMATED ACCURACY: ± 0.7 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Summit of small nunatak south of Hettene "1740". (1)

REFERENCE SOURCE

(1) 02764

440

ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE: 72° 13.80'S (1)	STATION DESIGNATION: BAMSEFJELL
LONGITUDE: 21° 59.37'E (1)	
ELEVATION: 1669.0 METERS (1)	COUNTRY/STATE: Antarctica

REFERENCE CODE NUMBERS	
ACIC 4933-1	

ADOPTED GRAVITY VALUE

g= 982 253.93 mgals

ESTIMATED ACCURACY	DATE
± 0.7 mgals	MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Small cairn near the snow-rock contact to the northeast of Bamsefjell "2210". (1)

REFERENCE SOURCE

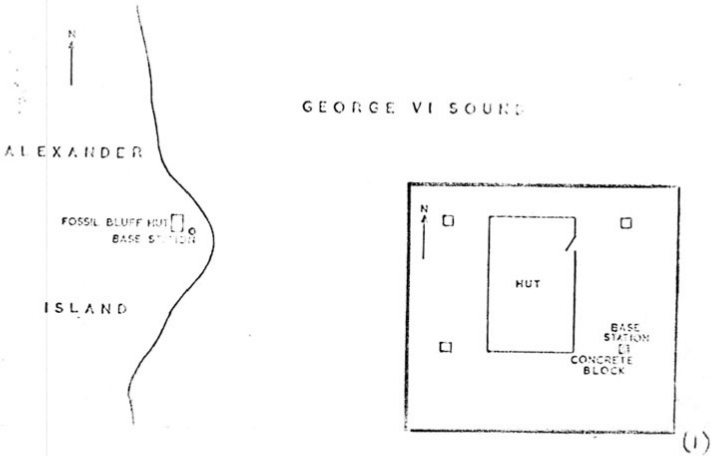
(1) 02764

GRAVITY BASE STATION

LATITUDE: 71° 20.0'S (1)	STATION DESIGNATION: FOSSIL BLUFF
LONGITUDE: 68° 17.0'W (1)	
ELEVATION: 39 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4934-1	ADOPTED GRAVITY VALUE: g= 982 659.44 mgals
	ESTIMATED ACCURACY: ± 1.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Station located at Fossil Bluff, Alexander Island; on a concrete guying block on the southeast side of the hut. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

(1) 02329

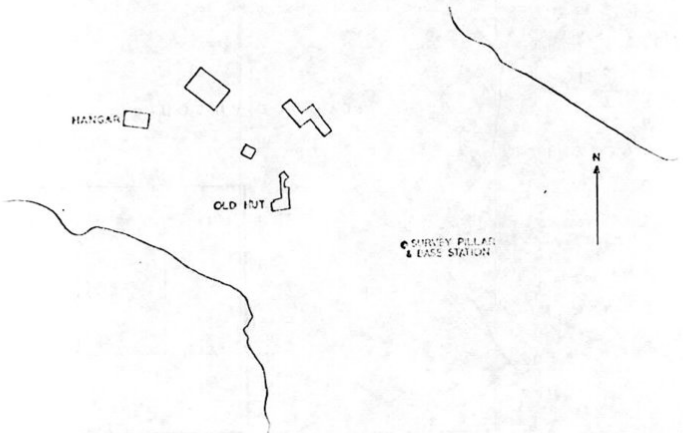
442

GRAVITY BASE STATION

LATITUDE: 68° 11.3'S (1)	STATION DESIGNATION: STONINGTON ISLAND
LONGITUDE: 67° 00.5'W (1)	COUNTRY/STATE: Antarctica
ELEVATION: 17 METERS (1)	ADOPTED GRAVITY VALUE: g= 982 504.74 mgals
REFERENCE CODE NUMBERS: ACIC 4935-1	ESTIMATED ACCURACY: ± 1.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Station is located on Stonington Island, Marguerite Bay, on top of the survey pillar between the old and new huts. (1)



(1)

REFERENCE SOURCE

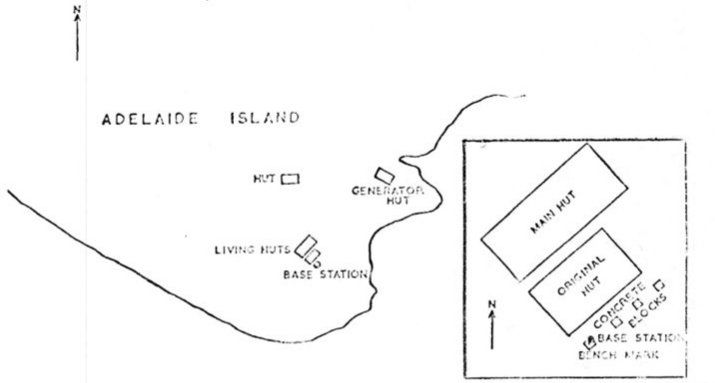
(1) 02329

GRAVITY BASE STATION

LATITUDE: 67° 46.0'S (1)	STATION DESIGNATION: ADELAIDE ISLAND
LONGITUDE: 68° 55.0'W (1)	
ELEVATION: 4 METERS (1)	COUNTRY/STATE: Antarctica
REFERENCE CODE NUMBERS: ACIC 4936-1	ADOPTED GRAVITY VALUE: g= 982 514.34 mgals
	ESTIMATED ACCURACY: ± 1.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Station is located on southern Adelaide Island; on the bench mark on a concrete block on the south side of the old living hut. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

(1) 02329

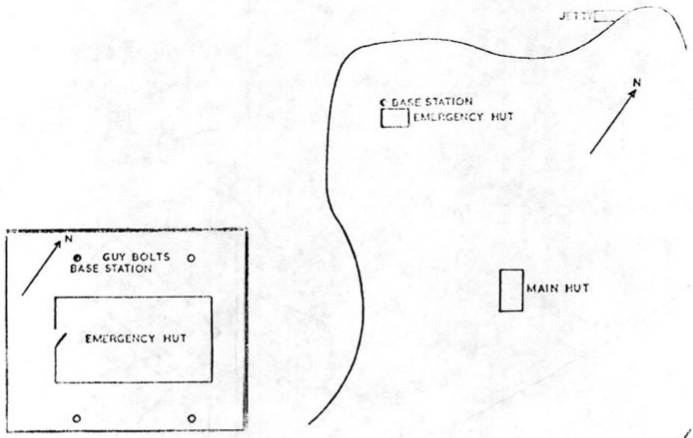
GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
66° 52.5'S (1)	DETAILLE ISLAND
LONGITUDE	
66° 49.0'W (1)	
ELEVATION	**COUNTRY/STATE**
5 METERS (1)	Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4937-1		g= 982 445.24 mgals	
		ESTIMATED ACCURACY	DATE
		± 1.0 mgals	MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

Station is located on Detaille Island, Loubet Coast; over a guy bolt on a concrete block on the seaward side of the emergency store hut at the British scientific station. (1)



(1)

REFERENCE SOURCE

(1) 02329

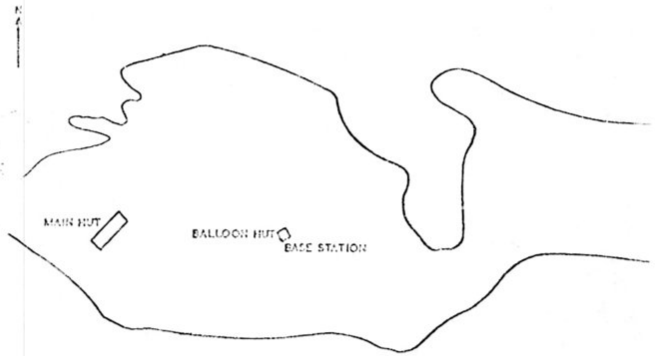
445

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
65° 14.6'S (1)	GALINDEZ ISLAND
LONGITUDE	
64° 16.0'W (1)	
ELEVATION	**COUNTRY/STATE**
9 METERS (1)	Antarctica
REFERENCE CODE NUMBERS	**ADOPTED GRAVITY VALUE**
ACIC 4938-1	g= 982 334.54 mgals
	ESTIMATED ACCURACY / **DATE**
	± 1.0 mgals / MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

Station is located on Galindez Island, Argentine Islands. The Station is on a flat concrete floor of the balloon hut at the British scientific station. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

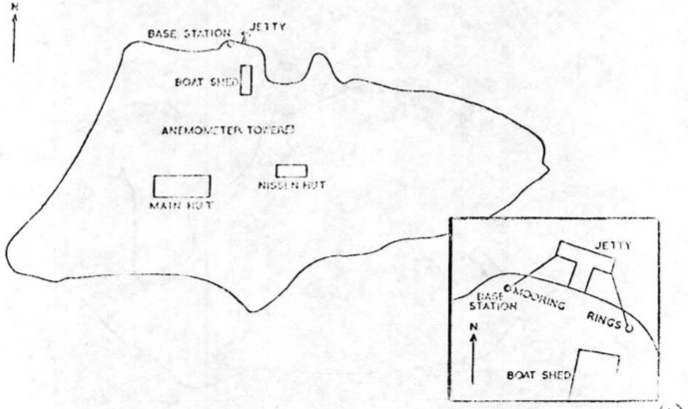
(1) 02329

GRAVITY BASE STATION

LATITUDE: 64° 49.5'S (1)	STATION DESIGNATION: PORT LOCKROY
LONGITUDE: 63° 30.5'W (1)	COUNTRY/STATE: Antarctica
ELEVATION: METERS	ADOPTED GRAVITY VALUE: g= 982 298.94 mgals
REFERENCE CODE NUMBERS: ACIC 4939-1	ESTIMATED ACCURACY: ± 1.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Station is located at Port Lockroy, Danco Coast; over a mooring ring on a flat rock on the southwest side of the jetty on Goudier Island. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

(1) 02329

ACIC HQ FORM FEB 69 O-415

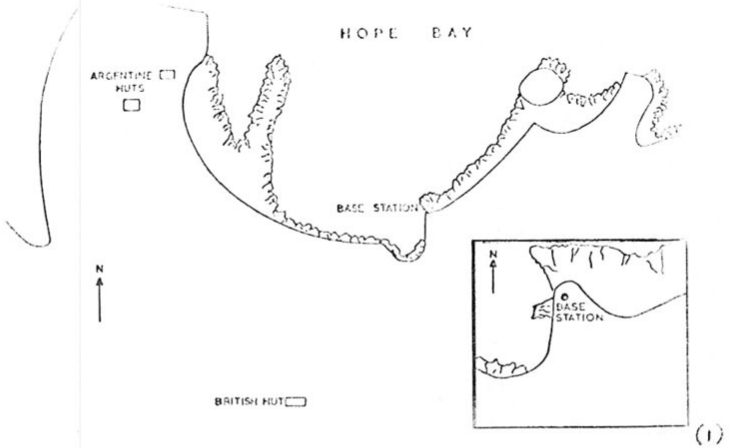
GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
63° 24.0'S (1)	HOPE BAY (ESPERANZA)
LONGITUDE	
56° 58.6'W (1)	
ELEVATION	**COUNTRY/STATE**
3 METERS (1)	Antarctica

REFERENCE CODE NUMBERS	ADOPTED GRAVITY VALUE	
ACIC 4940-1	g= 982 247.83 mgals	
	ESTIMATED ACCURACY	DATE
	± 1.0 mgals	MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

The station is at Hope Bay, Trinity Peninsula on a flat concrete slab of rocks immediately above the remains of the jetty. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

(1) 02329

448

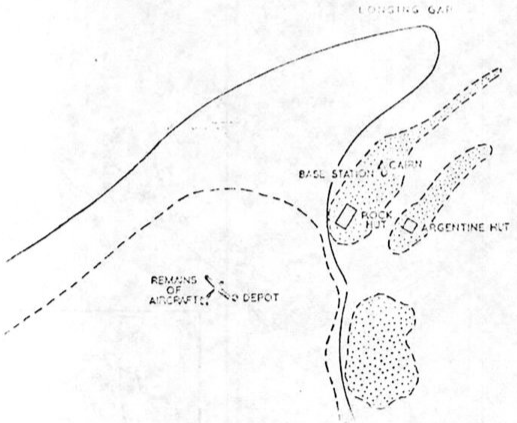
GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
64° 28.0'S (1)	CAPE LONGING
LONGITUDE	
59° 00.0'W (1)	
ELEVATION	**COUNTRY/STATE**
76 METERS (1)	Antarctica

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4941-1		g= 982 289.34 mgals	
		ESTIMATED ACCURACY	DATE
		± 1.0 mgals	MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

The station is on Trinity Peninsula, at foot of the astrofix survey cairn on a spur of land, at Longing Gap, 8 miles (12.9km) north of Cape Longing. (1)



(1)

REFERENCE SOURCE

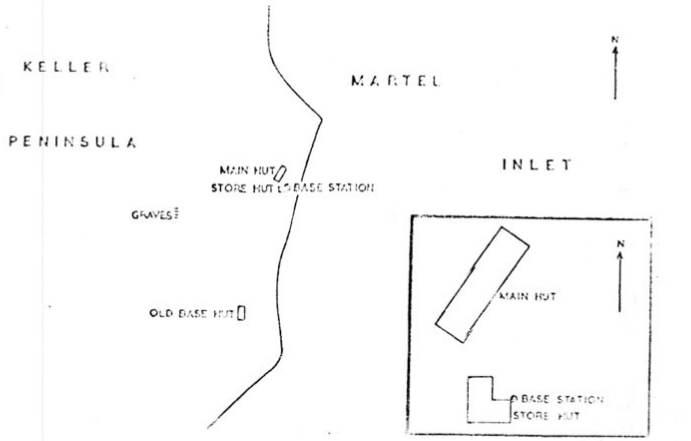
(1) 02329

GRAVITY BASE STATION

LATITUDE: 60° 05.0'S (1)	STATION DESIGNATION: ADMIRALTY BAY
LONGITUDE: 58° 24.5'W (1)	COUNTRY/STATE: South Shetland Islands/ King George Island
ELEVATION: 9 METERS (1)	ADOPTED GRAVITY VALUE: g= 982 188.33 mgals
REFERENCE CODE NUMBERS: ACIC 4942-1	ESTIMATED ACCURACY: ± 1.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

The station is on a concrete platform outside the black painted stores hut on the seaward side of the main hut. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

(1) 02329

450

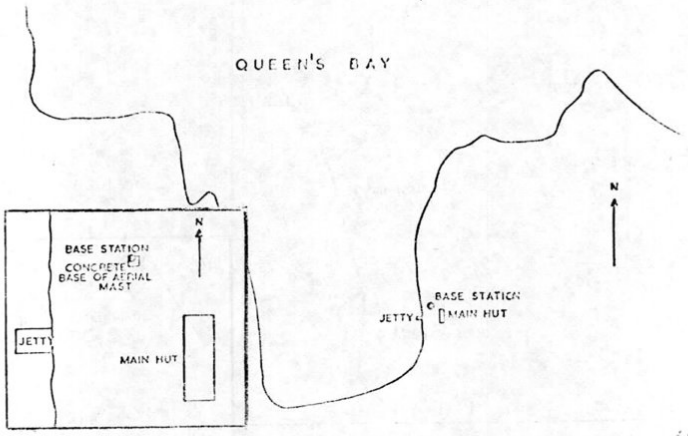
GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
60° 43.0'S (1)	SIGNY ISLAND
LONGITUDE	
45° 35.6'W (1)	
ELEVATION	**COUNTRY/STATE**
4 METERS (1)	South Orkney Island

REFERENCE CODE NUMBERS	ADOPTED GRAVITY VALUE	
ACIC 4943-1	g= 982 134.76 mgals	
	ESTIMATED ACCURACY	DATE
	± 1.0 mgals	MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

The station is on the winch block in front of the hut. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

(1) 02329

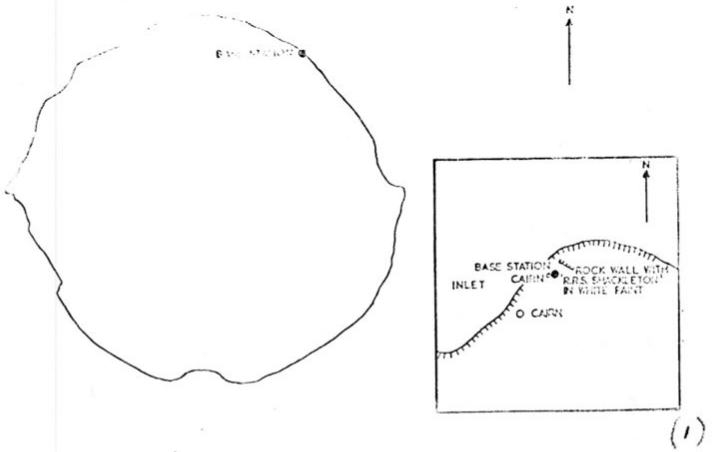
451

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
56° 16.3'S (1)	ZAVODOVSKI ISLAND
LONGITUDE	
27° 33.6'W (1)	
ELEVATION	**COUNTRY/STATE**
4 METERS (1)	South Sandwich Islands
REFERENCE CODE NUMBERS	**ADOPTED GRAVITY VALUE**
ACIC 4944-1	g= 981 839.67 mgals
	ESTIMATED ACCURACY / **DATE**
	± 1.0 mgals / MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

The station is on the cliffs of columnar lava on the northeast coast of the island. The locality is marked by a large survey cairn 6 feet (1.8m) high to the southwest of the base station. The base itself is identified by a smaller cairn 2 feet (0.6m) high. (1)



(1)

REFERENCE SOURCE

(1) 02329

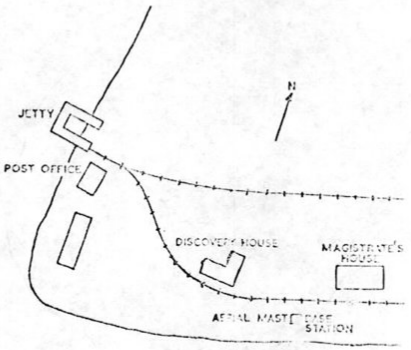
452

GRAVITY BASE STATION

LATITUDE: 54° 16.5'S (1)	STATION DESIGNATION: KING EDWARD POINT
LONGITUDE: 36° 29.5'W (1)	
ELEVATION: METERS	COUNTRY/STATE: South Georgia Is.
REFERENCE CODE NUMBERS: ACIC 4945-1	ADOPTED GRAVITY VALUE: g= 981 516.67 mgals
	ESTIMATED ACCURACY: ± 1.0 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

Station is on concrete base of the wireless mast between the railway line and the beach on the south side of King Edward Point. It is marked by a brass plate. (1)



(1)

REFERENCE SOURCE

(1) 02329

453

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
53° 01.2'S (1)	HEARD IS.
LONGITUDE	
73° 23.1'E (1)	
ELEVATION METERS	**COUNTRY/STATE** Heard Island

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 4946-1		g= 981 476.85 mgals	
WA 9005			
		ESTIMATED ACCURACY	DATE
		± 0.5 mgals	MONTH/YEAR May 1972

DESCRIPTION AND/OR SKETCH

On floor of gravity hut. (1)

REFERENCE SOURCE

(1) 00916

454

GRAVITY BASE STATION

LATITUDE: 48° 40'S (1)	STATION DESIGNATION: KERGUELEN IS.
LONGITUDE: 69° 14'E (1)	COUNTRY/STATE: Kerguelen Island
ELEVATION: METERS	ADOPTED GRAVITY VALUE: g= 981 072.45 mgals
REFERENCE CODE NUMBERS: ACIC 4947-1; WA 9017	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: May 1972

DESCRIPTION AND/OR SKETCH

At end of ionospheric hut toward sea inside garage about three feet from wall. (1)

REFERENCE SOURCE

(1) 00916

APPENDIX A.10

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