5. Australia

5.1 Introduction

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

CROSS REFERENCE LIST
AUSTRALIA

STATION DESIGNATION	ACIC REF NO
ADELAIDE	3642-1
ALBANY	3652-1
ALBURY	2192-0
ALICE SPRINGS	3668-1
ANNA PLAINS	3661-1
ARMIDALE	3678-1
BIRDSVILLE	3683-1
BOMBALA	3639-1
BOULIA	3682-1
BRISBANE	0027-4
BROKEN HILL	3673-1
CAIRNS	0230-2
CANBERRA	2191-1
CARNARVON	3658-1
CEDUNA	3644-1
CLERMONT	3679-1
COBAR	3675-1
DALY WATERS	3666-1
DARWIN	0231-1
DERBY	3662-1
ESPERANCE	3647-1
EUCLA	3645-1
FORREST	3646-1
GERALDTON	3654-1
GRAFTON	2193-1
HALLS CREEK	3663-1
HAY	3674-1
HOBART	3687-1
HUGHENDEN	3680-1
KALGOORLIE	3648-1
KEMPSEY	2196-0
LAVERTON	3649-1
LEIGH CREEK	3670-1
LONGREACH	3681-1
MACKAY	2197-1
MARYBOROUGH	2198-1
MELBOURNE	0098-0
MERREDIN	3650-1
MILDURA	3672-1
MOUNT MAGNET	3655-1
MT GAMBIER	3641-1
MT ISA	2194-0
MUNDIWINDI	3657-1

CROSS REFERENCE LIST
AUSTRALIA

STATION DESIGNATION	ACIC REF NO
ONSLOW	3659-1
OODNADATTA	3669-1
PARKES	3676-1
PERTH	3651-1
PORT HEDLAND	3660-1
QUILPIE	3684-1
ROCKHAMPTON	2195-2
ROMA	3685-1
SYDNEY	0138-1
TENNANT CREEK	3667-1
TOWNSVILLE	0241-3
VICTORIA RIVER DOWNS	3665-1
WAGGA WAGGA	3640-1
WALGETT	3677-1
WATHEROO	3653-1
WHYALLA	3643-1
WILUNA	3656-1
WOOMERA	3671-1
WYNDHAM	3664-1
YARRAM	3638-1

GRAVITY BASE STATION

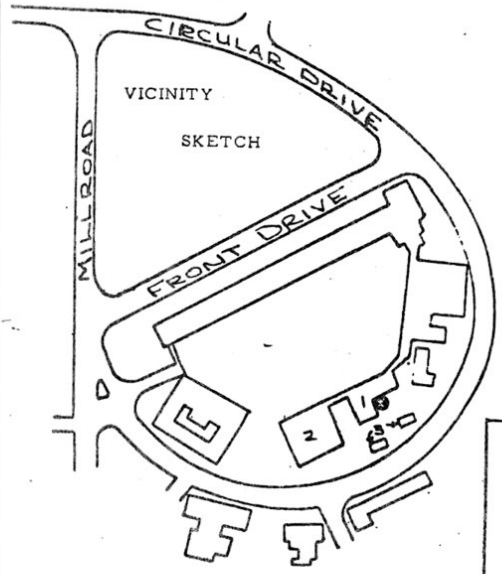
LATITUDE: 27° 30.20'S (1)	STATION DESIGNATION: BRISBANE
LONGITUDE: 153° 01.10'E (1)	
ELEVATION: 25 METERS (1)	COUNTRY/STATE: Australia/Queensland

REFERENCE CODE NUMBERS	ADOPTED GRAVITY VALUE	
ACIC 0027-4	g= 979 168.98 mgals	
IGB 41773D		
BMR 6091.0147	ESTIMATED ACCURACY	DATE
	± 0.3 mgals	MONTH/YEAR 7/70

DESCRIPTION AND/OR SKETCH

Observations were made in Brisbane at the University of Queensland Geology Building at the rear entrance.

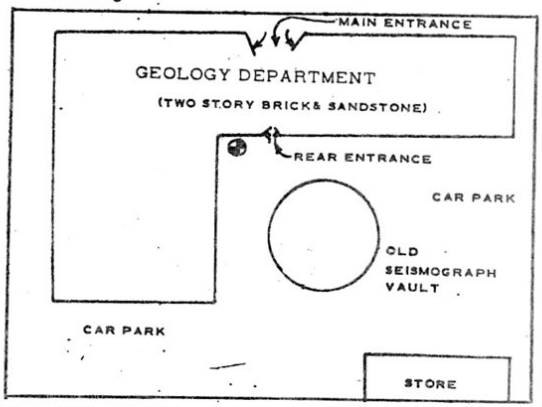
The site is located at the west edge and just outside the entrance, on the concrete pavement. (1)



(1)

1. GEOLOGY BUILDING
2. PHYSICS
3. TEMPORARY BUILDING

INSET:



REFERENCE SOURCE

(1) 01452

346

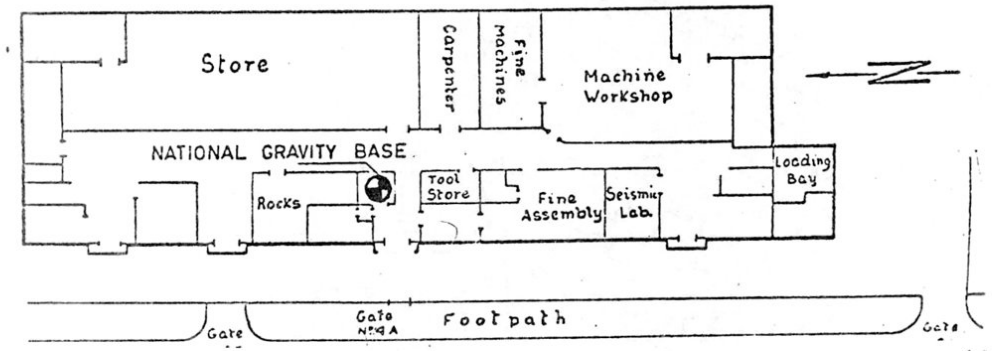
GRAVITY BASE STATION

LATITUDE 37° 47.20'S (1)	STATION DESIGNATION MELBOURNE
LONGITUDE 144° 53.50'E (1)	COUNTRY/STATE Australia/Victoria
ELEVATION 34.7 METERS (1)	ADOPTED GRAVITY VALUE g= 979 978.95 mgals
REFERENCE CODE NUMBERS: ACIC 0098-0; IGB 45474A; GW 83; BMR 5099.9901; BMR PS1; NHO 14.00	ESTIMATED ACCURACY ± 0.3 mgals; DATE MONTH/YEAR 7/70

DESCRIPTION AND/OR SKETCH

Observations were made near Melbourne in Footscray on Gordon Street at the Bureau of Mineral Resources Geophysical Laboratory.

The site is located inside the central gate (#4) entrance in the small room (Room 102). The site is marked with a red cross on the concrete floor. This is the Australian National fundamental station. (1)



(1)

REFERENCE SOURCE

(1) 01452

347

GRAVITY BASE STATION

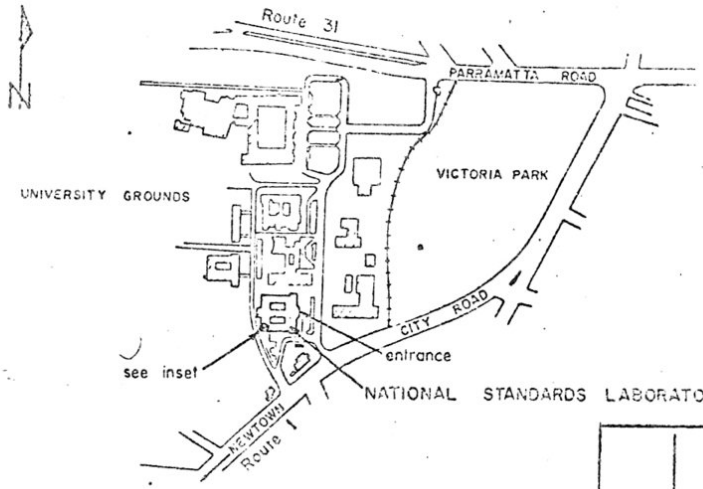
LATITUDE: 33° 53.40'S (1)	STATION DESIGNATION: SYDNEY
LONGITUDE: 151° 11.40'E (1)	
ELEVATION: 29.6 METERS (1)	COUNTRY/STATE: Australia/New South Wales

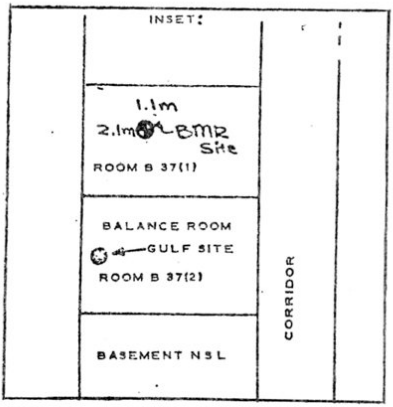
REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 0138-1		g = 979 685.59 mgals	
IGB 45331A			
BMR 5099.9905			
GW 84		ESTIMATED ACCURACY	DATE
		± 0.3 mgals	MONTH/YEAR 7/70

DESCRIPTION AND/OR SKETCH

Observations were made at the University of Sydney National Standard Laboratory.

The site is located in the basement, Room No 37, on the north-central part of the floor, under the linoleum rug and on the concrete. (1)





(1)

REFERENCE SOURCE

(1) 01452

GRAVITY BASE STATION

LATITUDE: 16° 55'S (1)	STATION DESIGNATION: CAIRNS
LONGITUDE: 145° 45'E (1)	COUNTRY/STATE: Australia/Queensland
ELEVATION: 3 METERS (1)	ADOPTED GRAVITY VALUE: g = 978 498.33 mgals

REFERENCE CODE NUMBERS

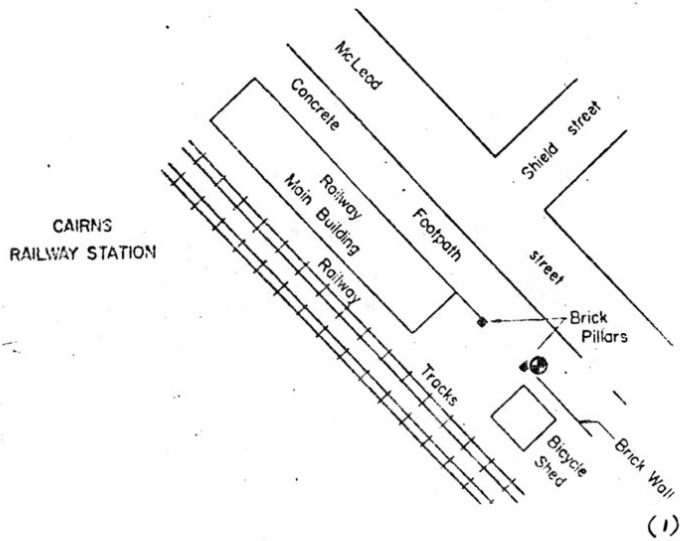
ACIC 0230-2
IGB 38265L
BMR 6591.0152

ESTIMATED ACCURACY	DATE
± 0.3 mgals	MONTH/YEAR: 7/70

DESCRIPTION AND/OR SKETCH

Observations were made in Cairns near the McLeon-Shield Street intersection at the railway station.

The site is located in the southeast courtyard of the main terminal building at the base of the southeast brick pillar of the driveway entrance. (1)



(1)

REFERENCE SOURCE

(1) 01452

GRAVITY BASE STATION

LATITUDE: 12° 27.50'S (1)	STATION DESIGNATION: DARWIN
LONGITUDE: 130° 50.20'E (1)	
ELEVATION: 22.7 METERS (1)	COUNTRY/STATE: Australia/Northern Territory

REFERENCE CODE NUMBERS

ACIC 0231-1
IGB 38320A
GW 88
BMR 6491.0532
NHO 15.00

ADOPTED GRAVITY VALUE

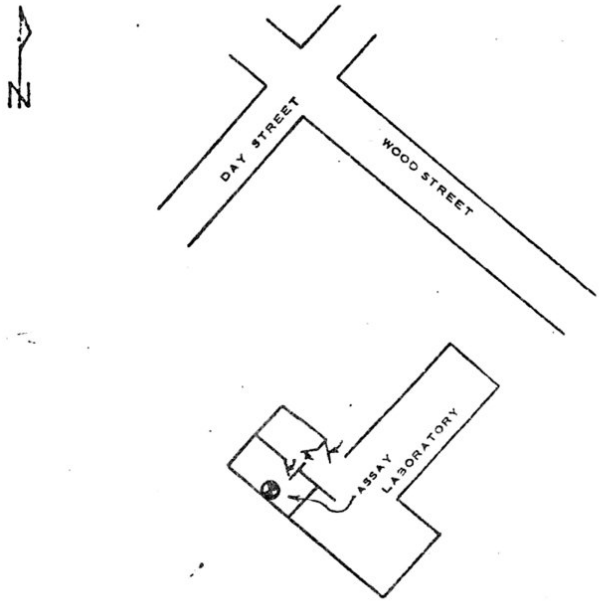
g = 978 313.17 mgals

ESTIMATED ACCURACY	DATE
± 0.3 mgals	MONTH/YEAR: 7/70

DESCRIPTION AND/OR SKETCH

Observations were made in Darwin at the Bureau of Mineral Resources building located at the south corner of Daly and Wood Streets.

The site is located in the Assay Laboratory's south corner. (1)



(1)

REFERENCE SOURCE

(1) 01452

350

GRAVITY BASE STATION

LATITUDE: 19° 15.70'S (1)	STATION DESIGNATION: TOWNSVILLE
LONGITUDE: 146° 46.80'E (1)	
ELEVATION: 20 METERS (1)	COUNTRY/STATE: Australia/Queensland

REFERENCE CODE NUMBERS	
ACIC 0241-3	
IGB 38296C	
BMR 6499.0151	

ADOPTED GRAVITY VALUE

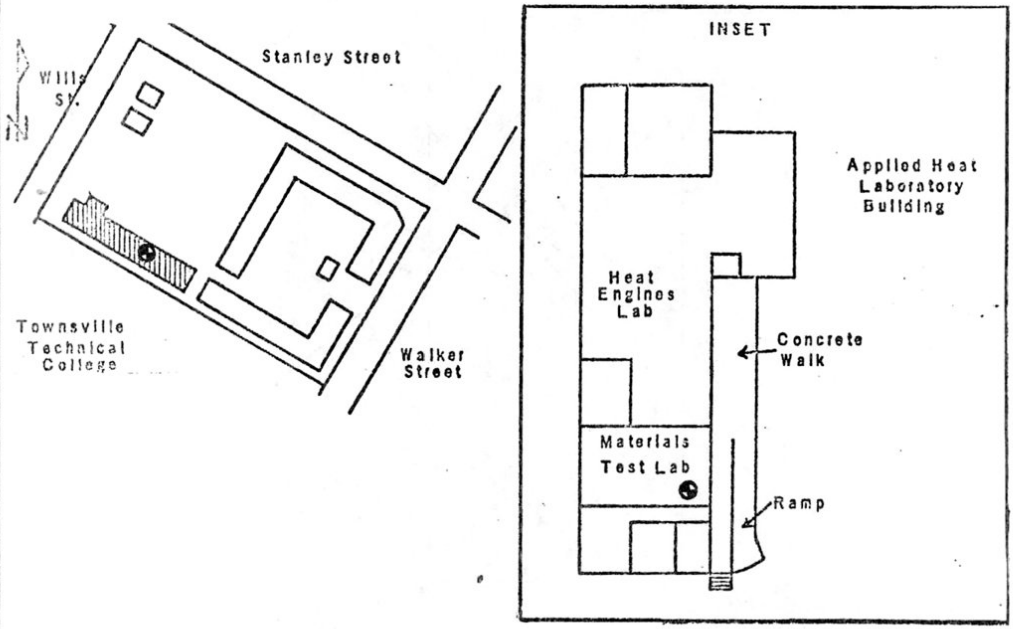
g= 978 623.30 mgals

ESTIMATED ACCURACY	DATE
± 0.3 mgals	MONTH/YEAR 7/70

DESCRIPTION AND/OR SKETCH

Observations were made in Townsville at the Technical College and High School, at the corner of Stanley Street and Walker Street.

The site is located in the Applied Heat Laboratory Building in the Materials Test Lab, near the southeast corner on the concrete floor. (1)



(1)

REFERENCE SOURCE

(1) 01452

351

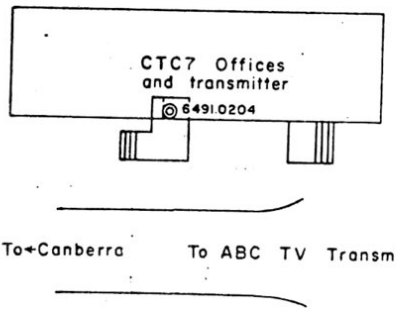
GRAVITY BASE STATION

LATITUDE: 35° 18'S (1)	STATION DESIGNATION: CANBERRA
LONGITUDE: 149° 06'E (1)	COUNTRY/STATE: Australia/A.C.T.
ELEVATION: 750 METERS (1)	ADOPTED GRAVITY VALUE: g = 979 561.02 mgals
REFERENCE CODE NUMBERS: ACIC 2191-1; IGB 45459K; BMR 6491.0204	ESTIMATED ACCURACY: ± 0.3 mgals
	DATE: MONTH/YEAR 7/70

DESCRIPTION AND/OR SKETCH

Observations were made northwest of Canberra on Black Mountain at the CTC TV Building.

The site is located on the main entrance porch just outside the door. (1)



(1)

REFERENCE SOURCE

(1) 01452

352

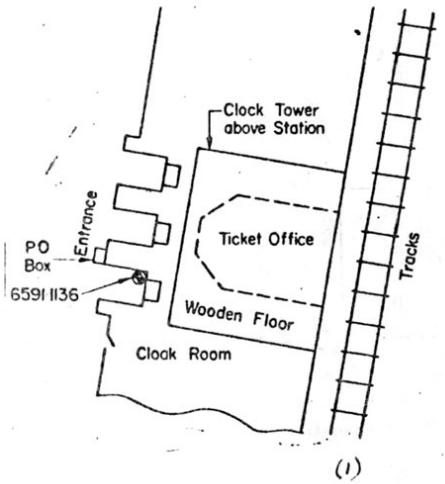
GRAVITY BASE STATION

LATITUDE 36° 04'S (1)	STATION DESIGNATION ALBURY
LONGITUDE 146° 51'E (1)	
ELEVATION 182 METERS (1)	COUNTRY/STATE Australia/New South Wales
REFERENCE CODE NUMBERS: ACIC 2192-0; IGB 45466J; BMR 6591.1136	ADOPTED GRAVITY VALUE: g = 979 765.46 mgals
	ESTIMATED ACCURACY: ± 0.3 mgals; DATE MONTH/YEAR: 10/68

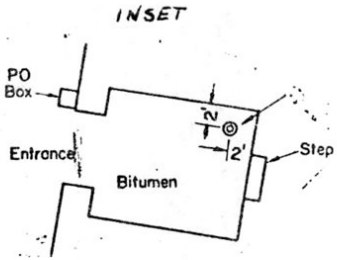
DESCRIPTION AND/OR SKETCH

Observations were made in Albury at the railway terminal, on the street side under the tower.

The site is located under the southernmost of three arches on the concrete porch just outside the door. (1)



(1)



REFERENCE SOURCE

(1) 01452

353

GRAVITY BASE STATION

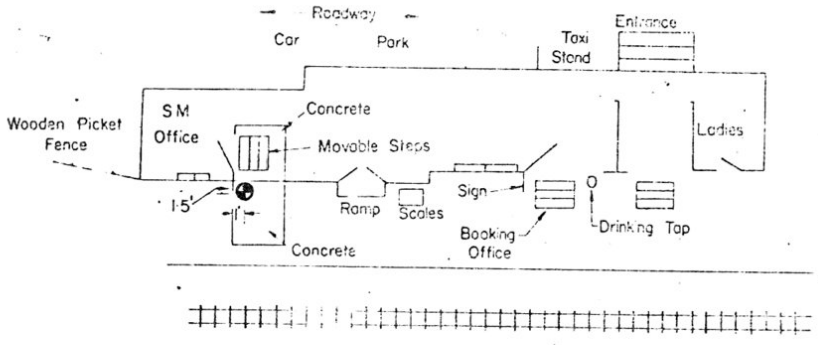
LATITUDE: 29° 41'S (1)	STATION DESIGNATION: GRAFTON
LONGITUDE: 152° 56'E (1)	
ELEVATION: 100 METERS (1)	COUNTRY/STATE: Australia/New South Wales

REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 2193-1		g = 979 320.02 mgals	
IGB 41792J		ESTIMATED ACCURACY	DATE
HMR 6491.1110		± 0.3 mgals	MONTH/YEAR 10/68

DESCRIPTION AND/OR SKETCH

Observations were made in Grafton at the railway station, on the track (south) side, on an inset concrete pad at the station master's office entrance.

The site is located on the northwest corner of the pad. (1)



(1)

REFERENCE SOURCE

(1) 01452

354

GRAVITY BASE STATION

LATITUDE: 20° 44'S (1)	STATION DESIGNATION: MT ISA
LONGITUDE: 139° 31'E (1)	
ELEVATION: 363 METERS (1)	COUNTRY/STATE: Australia/Queensland

REFERENCE CODE NUMBERS	
ACIC 2194-0	
IGB 41909J	
BMR 6491.0162	

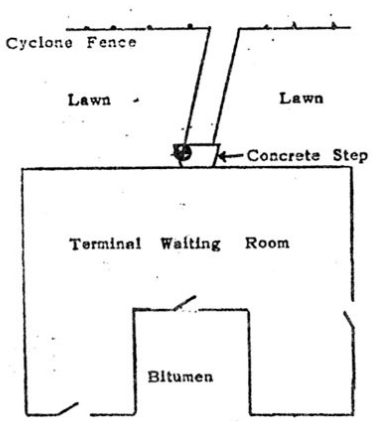
ADOPTED GRAVITY VALUE: g = 978 617.91 mgals

ESTIMATED ACCURACY	DATE
± 0.3 mgals	MONTH/YEAR: 10/68

DESCRIPTION AND/OR SKETCH

Observations were made east of Mt Isa at the Airport Terminal.

The site is located on the field (north) side, on the west edge of the concrete step to the field entrance. (1)



(1)

REFERENCE SOURCE

(1) 01452

355

GRAVITY BASE STATION

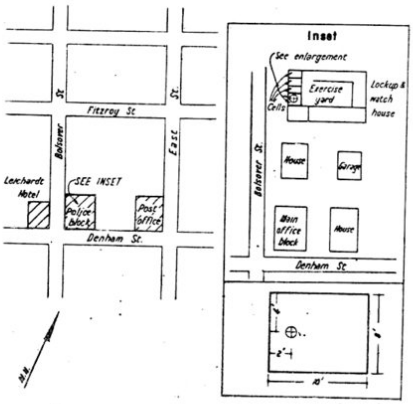
LATITUDE: 23° 23'S (1)	STATION DESIGNATION: ROCKHAMPTON
LONGITUDE: 150° 31'E (1)	
ELEVATION: 10 METERS (1)	COUNTRY/STATE: Australia/Queensland

REFERENCE CODE NUMBERS	ADOPTED GRAVITY VALUE
ACIC 2195-2	
IGB 41730A	g = 978 869.68 mgals
BMR 5099.9949	
	ESTIMATED ACCURACY: ± 0.3 mgals
	DATE: MONTH/YEAR 7/70

DESCRIPTION AND/OR SKETCH

Observations were made in Rockhampton at the police station (at the northeast corner of Bolsover and Denham Streets) in the "Lockup" house.

The site is located in the cell opposite the southwest corner of the exercise yard. (1)



(1)

REFERENCE SOURCE

(1) 01452

GRAVITY BASE STATION

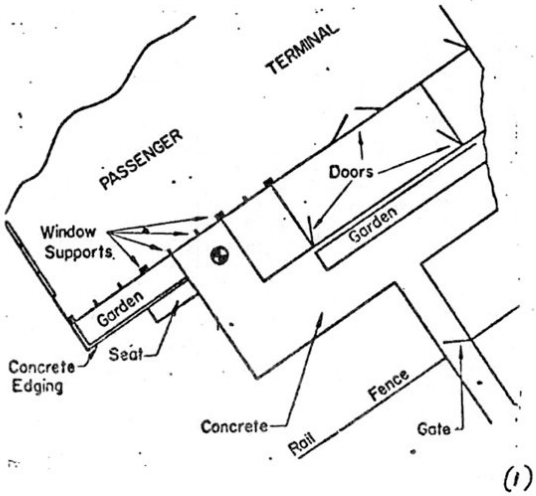
LATITUDE: 31° 05'S (1)	STATION DESIGNATION: KEMPSEY
LONGITUDE: 152° 47'E (1)	
ELEVATION: 16 METERS (1)	COUNTRY/STATE: Australia/New South Wales

REFERENCE CODE NUMBERS	ADOPTED GRAVITY VALUE	
ACIC 2196-0		
IGB 45312J	g = 979 426.06 mgals	
BMR 6491.9111		
	ESTIMATED ACCURACY	DATE
	± 0.3 mgals	MONTH/YEAR 7/70

DESCRIPTION AND/OR SKETCH

Observations were made west of Kempsey at the aerodrome passenger terminal, on the field (southwest) side.

The site is located to the west of the entryway, (between the roofed porch and flower bed) and on the lower concrete walk. (1)



(1)

REFERENCE SOURCE

(1) 01452

GRAVITY BASE STATION

LATITUDE: 21° 11'S (1)	STATION DESIGNATION: MACKAY
LONGITUDE: 149° 11'E (1)	
ELEVATION: 5 METERS (1)	COUNTRY/STATE: Australia/Queensland

REFERENCE CODE NUMBERS	
ACIC 2197-1	
IGB 41819A	
BMR 6499.9961	

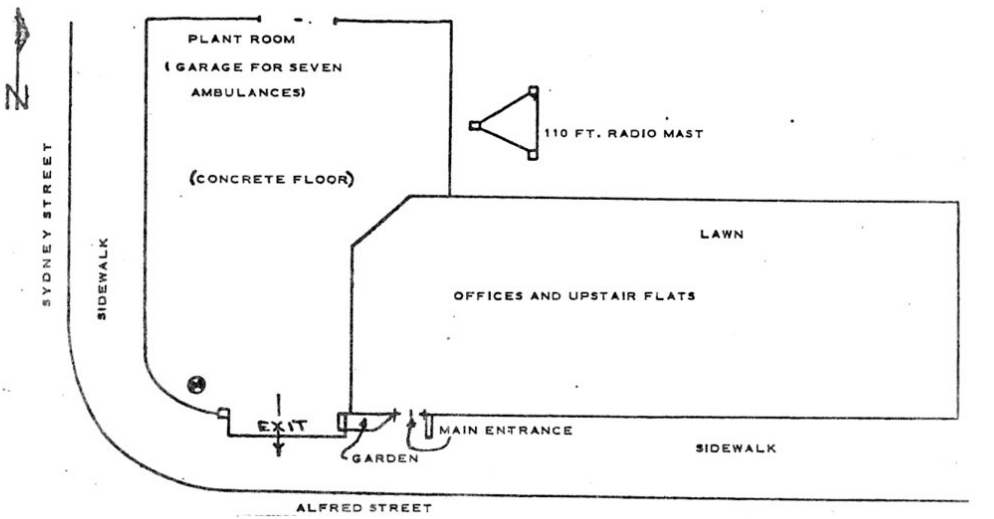
ADOPTED GRAVITY VALUE: g = 978 734.38 mgals

ESTIMATED ACCURACY	DATE
± 0.3 mgals	MONTH/YEAR: 7/70

DESCRIPTION AND/OR SKETCH

Observations were made in Mackay at the Queensland ambulance transportation board building (at northeast corner of Sydney and Alfred Streets).

The site is located in the rounded southwest corner of the garage. The station is monumented by a painted BMR station symbol on the concrete floor. (1)



(1)

REFERENCE SOURCE

(1) 01452

358

GRAVITY BASE STATION

LATITUDE: 25° 33'S (1)	STATION DESIGNATION: MARYBOROUGH
LONGITUDE: 152° 42'E (1)	COUNTRY/STATE: Australia/Queensland
ELEVATION: 10 METERS (1)	ADOPTED GRAVITY VALUE: g = 979 022.71 mgals

REFERENCE CODE NUMBERS

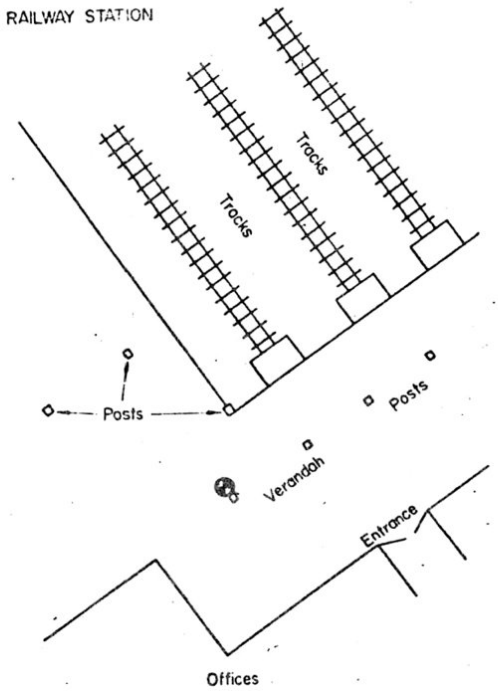
ACIC 2198-1
IGB 41752J
BMR 6591.0148

ESTIMATED ACCURACY	DATE
± 0.3 mgals	MONTH/YEAR: 10/68

DESCRIPTION AND/OR SKETCH

Observations were made in Maryborough at the railway station.

The site is on the trackside concrete verandah at the base of the end (corner) roof support post which is about three meters south of the southwest corner of the inset tracks. (1)



(1)

REFERENCE SOURCE

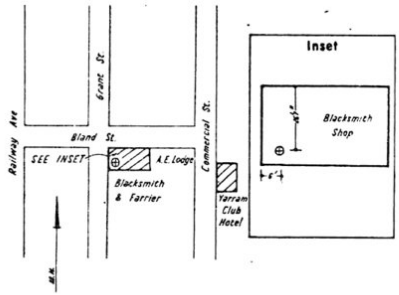
(1) 01452

GRAVITY BASE STATION

LATITUDE: 38° 33.9'S (1)	STATION DESIGNATION: YARRAM
LONGITUDE: 146° 40.5'E (1)	
ELEVATION: 19.8 METERS (1)	COUNTRY/STATE: Australia/Victoria
REFERENCE CODE NUMBERS: ACIC 3638-1	ADOPTED GRAVITY VALUE: g= 980 021.39 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals; DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a shop owned by Mr A. E. Lodge, Blacksmith and Farrier, Bland Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

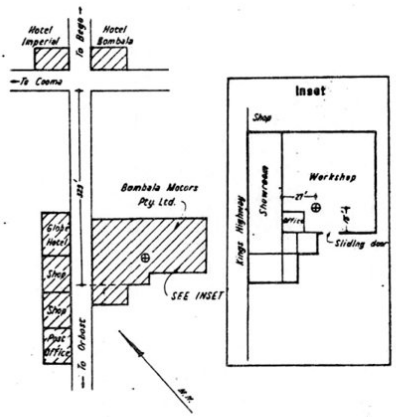
360

GRAVITY BASE STATION

LATITUDE 36° 54.8'S (1)	STATION DESIGNATION BOMBALA
LONGITUDE 149° 14.4'E (1)	
ELEVATION 706.2 METERS (1)	COUNTRY/STATE Australia/New South Wales
REFERENCE CODE NUMBERS: ACIC 3639-1	ADOPTED GRAVITY VALUE: g= 979 744.23 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 12/69

DESCRIPTION AND/OR SKETCH

In the workshop of Bombala Motors Pty Ltd, Kings Highway. (1)



(1)

REFERENCE SOURCE

(1) 00751

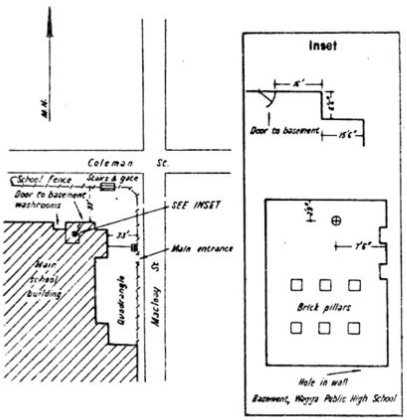
361

GRAVITY BASE STATION

LATITUDE 35° 07.5'S (1)	STATION DESIGNATION WAGGA WAGGA
LONGITUDE 147° 22.0'E (1)	
ELEVATION 212.1 METERS (1)	COUNTRY/STATE Australia/New South Wales
REFERENCE CODE NUMBERS: ACIC 3640-1	ADOPTED GRAVITY VALUE: g = 979 672.72 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals; DATE: MONTH/YEAR 12/69

DESCRIPTION AND/OR SKETCH

In the basement of the Wagga Public High School on Macleay Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

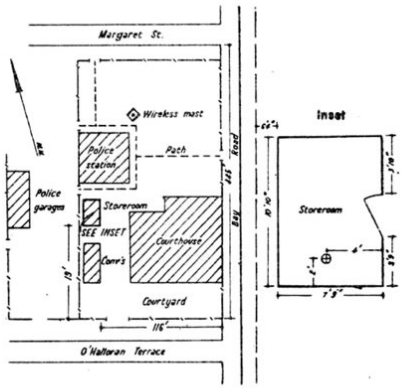
362

GRAVITY BASE STATION

LATITUDE 37° 50.1'S (1)	STATION DESIGNATION MT GAMBIER
LONGITUDE 140° 46.5'E (1)	
ELEVATION 44.2 METERS (1)	COUNTRY/STATE Australia/South Australia
REFERENCE CODE NUMBERS: ACIC 3641-1	ADOPTED GRAVITY VALUE: g = 979 992.98 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the Police Station storeroom on Bay Road. (1)



(1)

REFERENCE SOURCE

(1) 00751

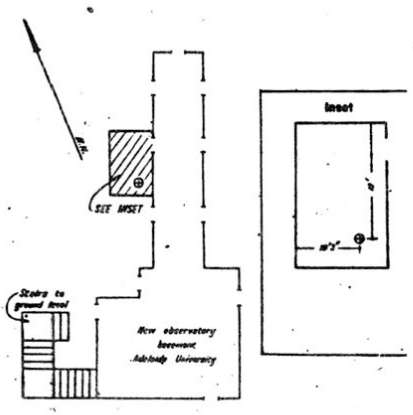
363

GRAVITY BASE STATION

LATITUDE: 34° 55.2'S (1)	STATION DESIGNATION: ADELAIDE
LONGITUDE: 138° 36.2'E (1)	
ELEVATION: 32.9 METERS (1)	COUNTRY/STATE: Australia/South Australia
REFERENCE CODE NUMBERS: ACIC 3642-1	ADOPTED GRAVITY VALUE: g = 979 722.93 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 12/69

DESCRIPTION AND/OR SKETCH

In the basement of the new Observatory, Adelaide University. (1)



(1)

REFERENCE SOURCE

(1) 00751

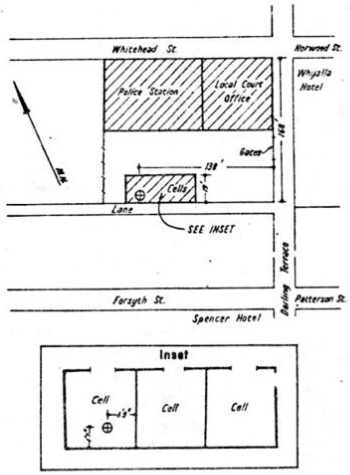
364

GRAVITY BASE STATION

LATITUDE 33° 02.4'S (1)	STATION DESIGNATION WHYALLA
LONGITUDE 137° 34.6'E (1)	
ELEVATION 14.9 METERS (1)	COUNTRY/STATE Australia/South Australia
REFERENCE CODE NUMBERS: ACIC 3643-1	ADOPTED GRAVITY VALUE: g= 979 569.90 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a cell at the Police Station, Darling Terrace. (1)



(1)

REFERENCE SOURCE

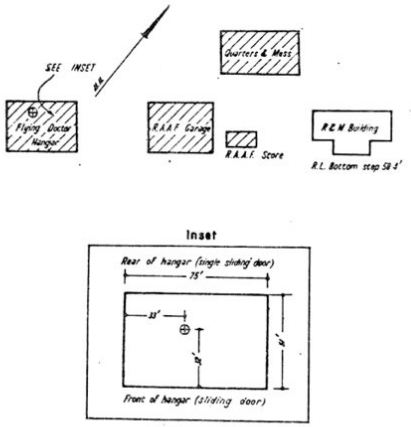
(1) 00751

GRAVITY BASE STATION

LATITUDE: 32° 07.5'S (1)	STATION DESIGNATION: CEDUNA
LONGITUDE: 133° 42.0'E (1)	
ELEVATION: 16.8 METERS (1)	COUNTRY/STATE: Australia/South Australia
REFERENCE CODE NUMBERS: ACIC 3644-1	ADOPTED GRAVITY VALUE: g = 979 451.77 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals; DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the Flying Doctor's hangar, R.A.A.F. Station. (1)



(1)

REFERENCE SOURCE

(1) 00751

366

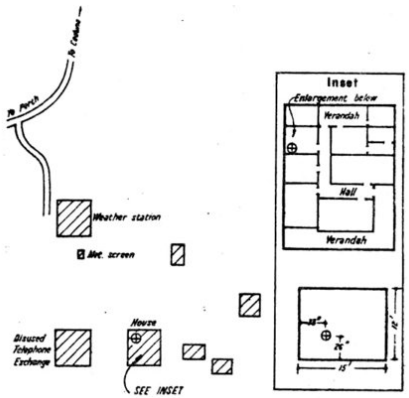
GRAVITY BASE STATION

LATITUDE 31° 43.1'S (1)	STATION DESIGNATION EUCLA
LONGITUDE 128° 53.5'E (1)	
ELEVATION 4.9 METERS (1)	COUNTRY/STATE Australia/Western Australia

REFERENCE CODE NUMBERS	ADOPTED GRAVITY VALUE	
ACIC 3645-1	g = 979 438.67 mgals	
	ESTIMATED ACCURACY	DATE
	± 0.5 mgals	MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a room of a disused house, 150 yards southwest of the weather station. (1)



(1)

REFERENCE SOURCE

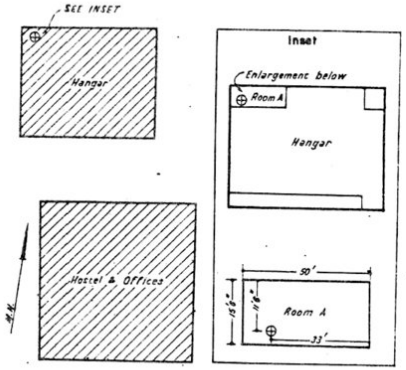
(1) 00751

GRAVITY BASE STATION

LATITUDE: 30° 50.9'S (1)	STATION DESIGNATION: FORREST
LONGITUDE: 128° 06.8'E (1)	
ELEVATION: 156.4 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3646-1	ADOPTED GRAVITY VALUE: g = 979 305.95 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the hangar of the Forrest aerodrome. (1)



(1)

REFERENCE SOURCE

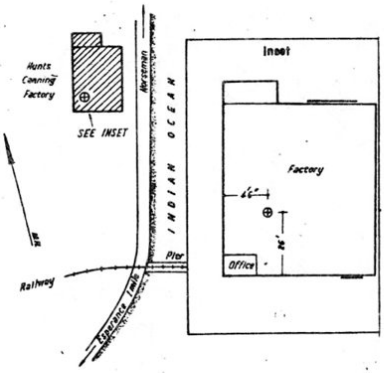
(1) 00751

GRAVITY BASE STATION

LATITUDE: 33° 51.9'S (1)	STATION DESIGNATION: ESPERANCE
LONGITUDE: 121° 54.1'E (1)	
ELEVATION: 4.9 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3647-1	ADOPTED GRAVITY VALUE: g = 979 620.81 mgals
ESTIMATED ACCURACY: ± 0.5 mgals	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In Hunts Canning Factory. (1)



(1)

REFERENCE SOURCE

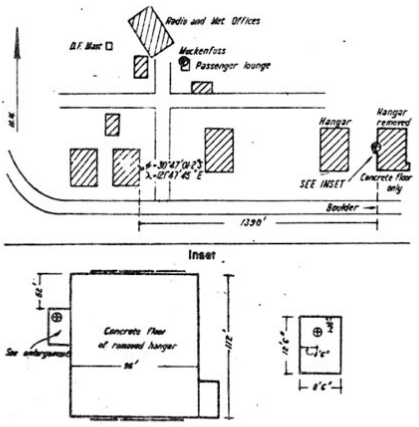
(1) 00751

GRAVITY BASE STATION

LATITUDE: 30° 47.0'S (1)	STATION DESIGNATION: KALGOORLIE
LONGITUDE: 121° 27.8'E (1)	COUNTRY/STATE: Australia/Western Australia
ELEVATION: 357.2 METERS (1)	ADOPTED GRAVITY VALUE: g= 979 290.64 mgals
REFERENCE CODE NUMBERS: ACIC 3648-1	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a hangar of the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

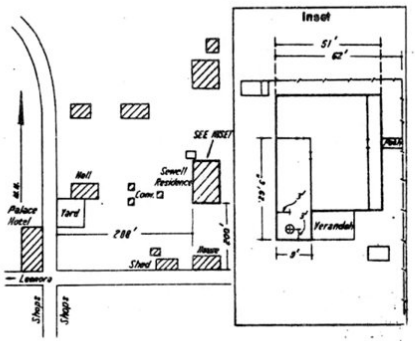
370

GRAVITY BASE STATION

LATITUDE 28° 37.3'S (1)	STATION DESIGNATION LAVERTON
LONGITUDE 122° 23.7'E (1)	
ELEVATION 457.5 METERS (1)	COUNTRY/STATE Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3649-1	ADOPTED GRAVITY VALUE: g= 979 100.20 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the Sewell residence, near the Palace Hotel. (1)



(1)

REFERENCE SOURCE

(1) 00751

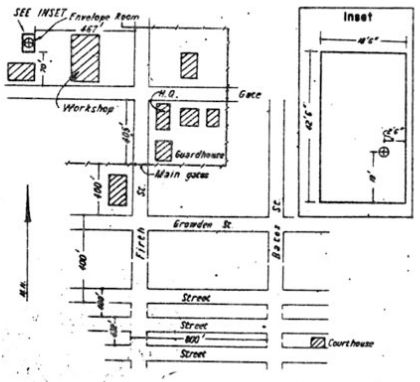
371

GRAVITY BASE STATION

LATITUDE: 31° 28.5'S (1)	STATION DESIGNATION: MERREDIN
LONGITUDE: 118° 16.4'E (1)	
ELEVATION: 315.5 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3650-1	ADOPTED GRAVITY VALUE: g = 979 342.95 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the Envelope Room, R.A.A.F. Station. (1)



(1)

REFERENCE SOURCE

(1) 00751

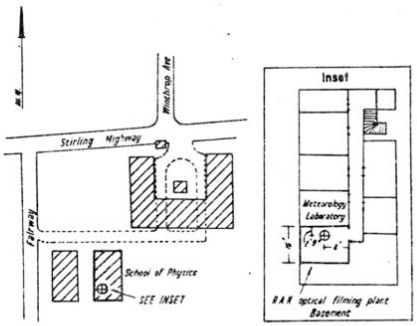
372

GRAVITY BASE STATION

LATITUDE: 31° 58.9'S (1)	STATION DESIGNATION: PERTH
LONGITUDE: 115° 48.8'E (1)	
ELEVATION: 5.2 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3651-1	ADOPTED GRAVITY VALUE: g = 979 394.37 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the basement, R.A.N. Optical Filming Plant, School of Physics. (1)



(1)

REFERENCE SOURCE

(1) 00751

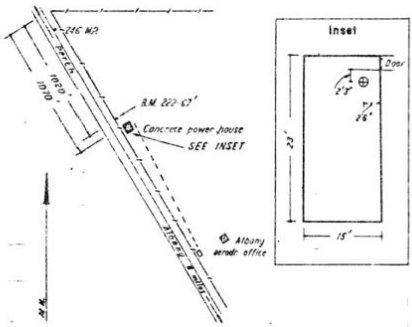
313

GRAVITY BASE STATION

LATITUDE: 34° 56.5'S (1)	STATION DESIGNATION: ALBANY
LONGITUDE: 117° 47.8'E (1)	
ELEVATION: 68.9 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3652-1	ADOPTED GRAVITY VALUE: g = 979 705.63 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 12/69

DESCRIPTION AND/OR SKETCH

In a concrete Power House, near Albany Aerodrome Office. (1)



(1)

REFERENCE SOURCE

(1) 00751

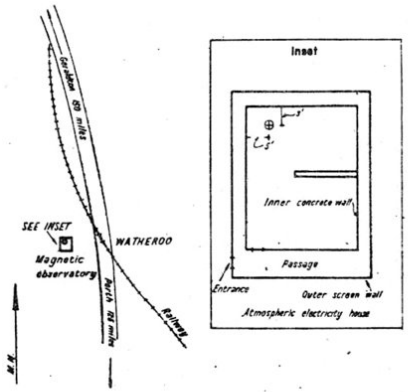
374

GRAVITY BASE STATION

LATITUDE: 30° 18.9'S (1)	STATION DESIGNATION: WATHEROO
LONGITUDE: 115° 52.5'E (1)	
ELEVATION: 239.9 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3653-1	ADOPTED GRAVITY VALUE: g= 979 216.03 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the Atmospheric Electricity House, Magnetic Observatory. (1)



(1)

REFERENCE SOURCE

(1) 00751

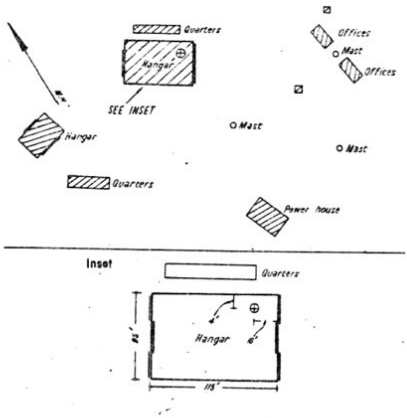
375

GRAVITY BASE STATION

LATITUDE 28° 47.5'S (1)	STATION DESIGNATION GERALDTON
LONGITUDE 114° 42.0'E (1)	
ELEVATION 33.2 METERS (1)	COUNTRY/STATE Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3654-1	ADOPTED GRAVITY VALUE: g = 979 270.64 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a hangar at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

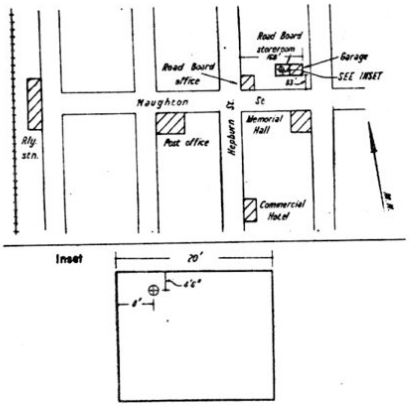
376

GRAVITY BASE STATION

LATITUDE 28° 03.2'S (1)	STATION DESIGNATION MOUNT MAGNET
LONGITUDE 117° 50.0'E (1)	
ELEVATION 424.9 METERS (1)	COUNTRY/STATE Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3655-1	ADOPTED GRAVITY VALUE: g= 979 074.70 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the Road Board storeroom, Naughton Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

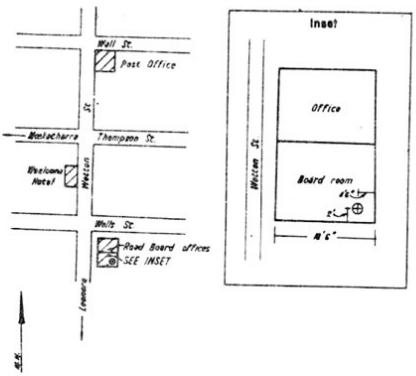
317

GRAVITY BASE STATION

LATITUDE: 26° 36.1'S (1)	STATION DESIGNATION: WILUNA
LONGITUDE: 120° 13.5'E (1)	
ELEVATION: 513.6 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3656-1	ADOPTED GRAVITY VALUE: g = 978 954.08 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the Board Room of the Road Board Office, Wotton Street. (1)



(1)

REFERENCE SOURCE

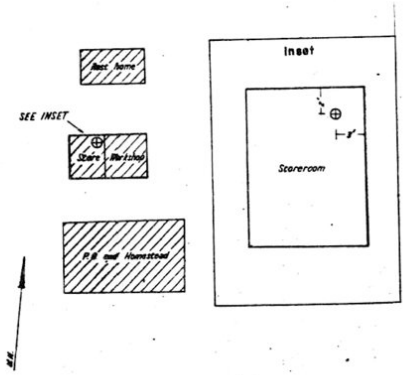
(1) 00751

GRAVITY BASE STATION

LATITUDE: 23° 52.1'S (1)	STATION DESIGNATION: MUNDIWINDI
LONGITUDE: 120° 09.9'E (1)	COUNTRY/STATE: Australia/Western Australia
ELEVATION: 560.8 METERS (1)	ADOPTED GRAVITY VALUE: g = 978 746.53 mgals
REFERENCE CODE NUMBERS: ACIC 3657-1	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE (MONTH/YEAR): 8/70

DESCRIPTION AND/OR SKETCH

In a storeroom between the Post Office and the Rest Home. (1)



(1)

REFERENCE SOURCE

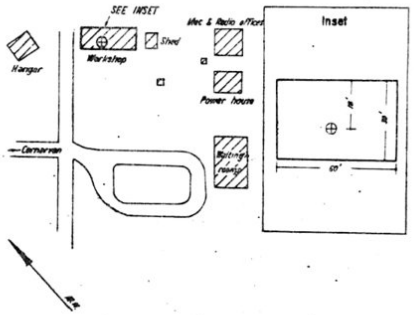
(1) 00751

GRAVITY BASE STATION

LATITUDE: 24° 52.9'S (1)	STATION DESIGNATION: CARNARVON
LONGITUDE: 113° 40.0'E (1)	
ELEVATION: 1.8 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3658-1	ADOPTED GRAVITY VALUE: g = 978 942.48 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a workshop at the aerodrome. (1)



(1)

REFERENCE SOURCE

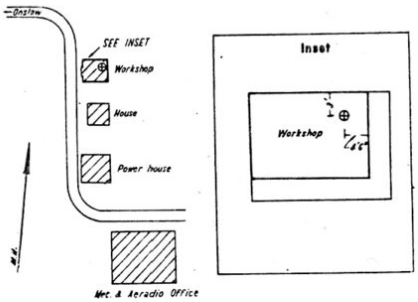
(1) 00751

GRAVITY BASE STATION

LATITUDE 21° 40.2'S (1)	STATION DESIGNATION ONSLOW
LONGITUDE 115° 06.2'E (1)	
ELEVATION 4.3 METERS (1)	COUNTRY/STATE Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3659-1	ADOPTED GRAVITY VALUE: g = 978 772.44 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In a workshop at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

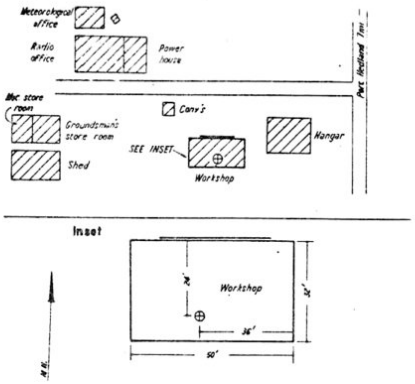
381

GRAVITY BASE STATION

LATITUDE: 20° 23.0'S (1)	STATION DESIGNATION: PORT HEDLAND
LONGITUDE: 118° 37.9'E (1)	
ELEVATION: 7.9 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3660-1	ADOPTED GRAVITY VALUE: g = 978 645.11 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a workshop at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

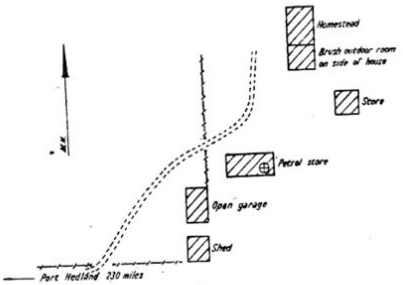
382

GRAVITY BASE STATION

LATITUDE 19° 15.5'S (1)	STATION DESIGNATION ANNA PLAINS
LONGITUDE 121° 29.3'E (1)	
ELEVATION 6.1 METERS (1)	COUNTRY/STATE Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3661-1	ADOPTED GRAVITY VALUE: g = 978 623.11 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the petrol store of the Anna Plains Cattle Station. (1)



(1)

REFERENCE SOURCE

(1) 00751

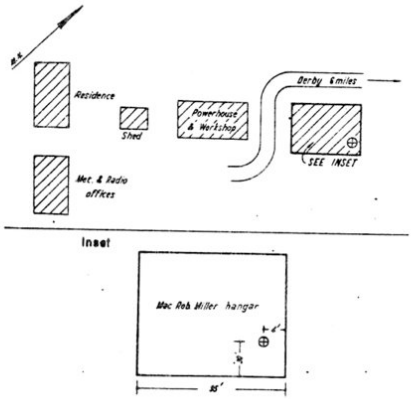
ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE: 17° 22.7'S (1)	STATION DESIGNATION: DERBY
LONGITUDE: 123° 39.2'E (1)	
ELEVATION: 6.7 METERS (1)	COUNTRY/STATE: Australia/Western Australia
REFERENCE CODE NUMBERS: ACIC 3662-1	ADOPTED GRAVITY VALUE: g= 978 519.29 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the Mac Robertson-Miller Hangar, at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

384

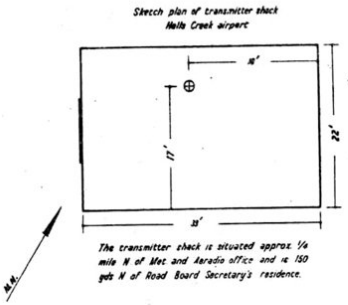
GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
18° 14.0'S (1)	HALLS CREEK
LONGITUDE	**COUNTRY/STATE**
127° 40.4'E (1)	Australia/Western Australia
ELEVATION	**ADOPTED GRAVITY VALUE**
406.9 METERS (1)	g= 978 461.27 mgals
REFERENCE CODE NUMBERS	**ESTIMATED ACCURACY** / **DATE**
ACIC 3663-1	± 0.5 mgals / MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the transmitter shack, 150 yards north of Road Board Secretary's residence.

(1)



(1)

REFERENCE SOURCE

(1) 00751

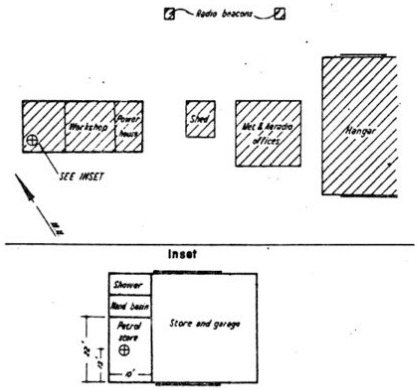
ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE	STATION DESIGNATION
15° 30.5'S (1)	WYNDHAM
LONGITUDE	
128° 08.5'E (1)	
ELEVATION	**COUNTRY/STATE**
5.8 METERS (1)	Australia/Western Australia
REFERENCE CODE NUMBERS	**ADOPTED GRAVITY VALUE**
ACIC 3664-1	g = 978 415.77 mgals
	ESTIMATED ACCURACY / **DATE**
	± 0.5 mgals / MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the petrol store at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

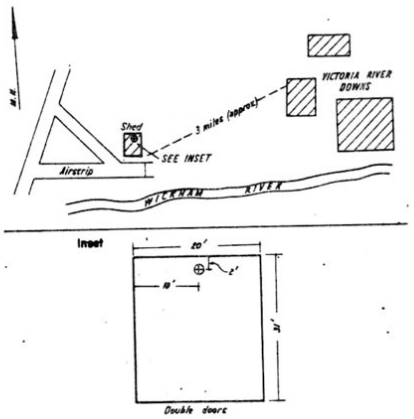
386

GRAVITY BASE STATION

LATITUDE: 16° 25.4'S (1)	STATION DESIGNATION: VICTORIA RIVER DOWNS
LONGITUDE: 130° 57.9'E (1)	
ELEVATION: 91.4 METERS (1)	COUNTRY/STATE: Australia/Northern Territory
REFERENCE CODE NUMBERS: ACIC 3665-1	ADOPTED GRAVITY VALUE: g = 978 424.77 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In a shed at the aerodrome. (1)



(1)

REFERENCE SOURCE

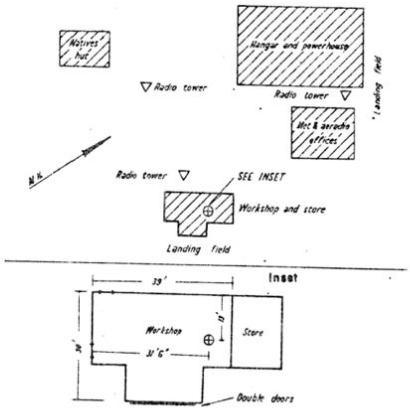
(1) 00751

GRAVITY BASE STATION

LATITUDE: 16° 16.1'S (1)	STATION DESIGNATION: DALY WATERS
LONGITUDE: 133° 22.5'E (1)	
ELEVATION: 212.1 METERS (1)	COUNTRY/STATE: Australia/Northern Territory
REFERENCE CODE NUMBERS: ACIC 3666-1	ADOPTED GRAVITY VALUE: g = 978 388.46 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals; DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a workshop at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

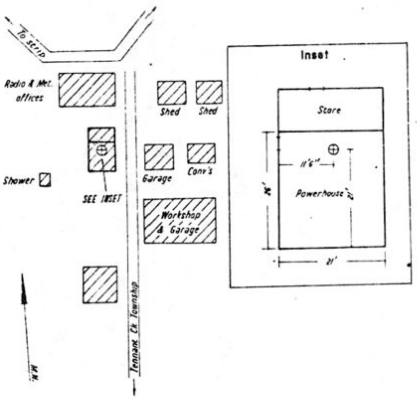
388

GRAVITY BASE STATION

LATITUDE: 19° 38.9'S (1)	STATION DESIGNATION: TENNANT CREEK
LONGITUDE: 134° 11.2'E (1)	COUNTRY/STATE: Australia/Northern Territory
ELEVATION: 376.4 METERS (1)	ADOPTED GRAVITY VALUE: g = 978 527.29 mgals
REFERENCE CODE NUMBERS: ACIC 3667-1; BMR 5099-9934	ESTIMATED ACCURACY: ± 0.5 mgals; DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the Power House at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

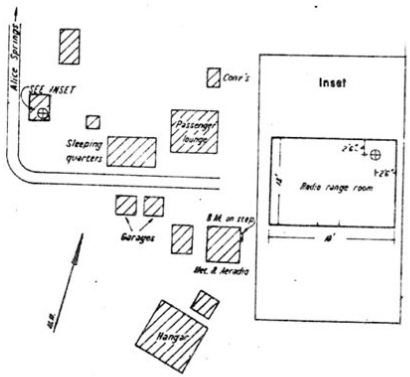
ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE: 23° 48.1'S (1)	STATION DESIGNATION: ALICE SPRINGS
LONGITUDE: 133° 52.7'E (1)	
ELEVATION: 546.5 METERS (1)	COUNTRY/STATE: Australia/Northern Territory
REFERENCE CODE NUMBERS: ACIC 3668-1; EMR 5099-9935	ADOPTED GRAVITY VALUE: g = 978 653.52 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals; DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the Radio Range Room at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

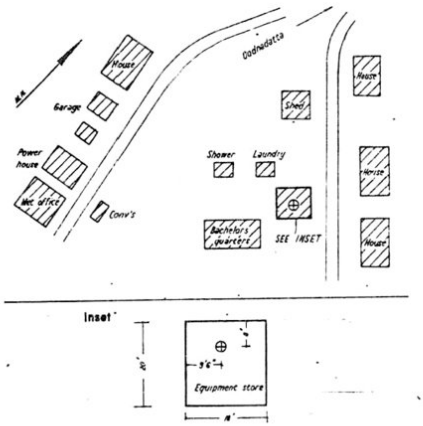
340

GRAVITY BASE STATION

LATITUDE 27° 33.3'S (1)	STATION DESIGNATION OODNADATTA
LONGITUDE 135° 26.5'E (1)	
ELEVATION 114.6 METERS (1)	COUNTRY/STATE Australia/South Australia
REFERENCE CODE NUMBERS: ACIC 3669-1	ADOPTED GRAVITY VALUE: g = 979 100.10 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the equipment store at the aerodrome. (1)



(1)

REFERENCE SOURCE

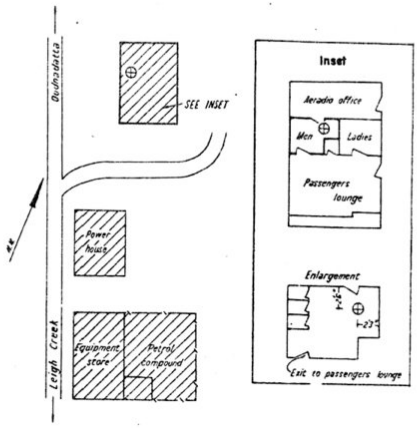
(1) 00751

GRAVITY BASE STATION

LATITUDE: 30° 28.6'S (1)	STATION DESIGNATION: LEIGH CREEK
LONGITUDE: 138° 24.9'E (1)	
ELEVATION: 192.0 METERS (1)	COUNTRY/STATE: Australia/South Australia
REFERENCE CODE NUMBERS: ACIC 3670-1	ADOPTED GRAVITY VALUE: g = 979 320.45 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the gentlemen's room off the Aeradio Office at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

342

GRAVITY BASE STATION

LATITUDE: 31° 08.7'S (1)	STATION DESIGNATION: WOOMERA
LONGITUDE: 136° 48.2'E (1)	COUNTRY/STATE: Australia/South Australia
ELEVATION: 165.5 METERS (1)	ADOPTED GRAVITY VALUE: g= 979 371.36 mgals
REFERENCE CODE NUMBERS: ACIC 3671-1	ESTIMATED ACCURACY: ± 0.5 mgals; DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

Center of the bombtail storeroom at the aerodrome. (1)

REFERENCE SOURCE

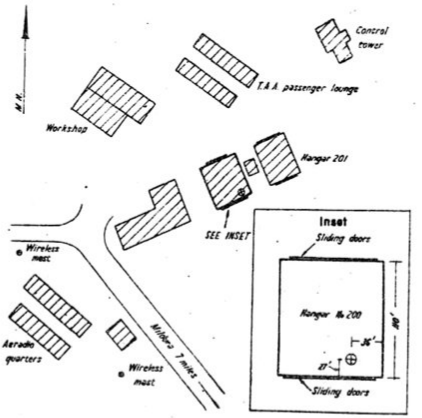
(1) 00751

GRAVITY BASE STATION

LATITUDE: 34° 13.5'S (1)	STATION DESIGNATION: MILDURA
LONGITUDE: 142° 04.4'E (1)	
ELEVATION: 50.3 METERS (1)	COUNTRY/STATE: Australia/Victoria
REFERENCE CODE NUMBERS: ACIC 3672-1	ADOPTED GRAVITY VALUE: g = 979 656.82 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In hangar no 200 at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

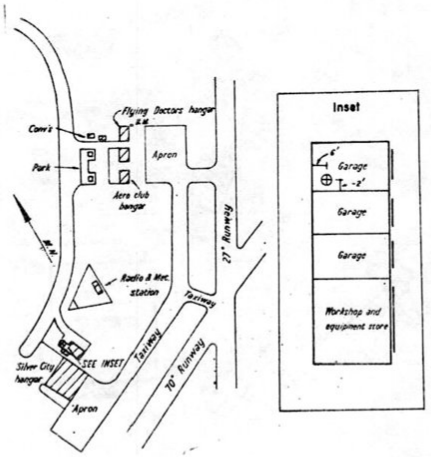
344

GRAVITY BASE STATION

LATITUDE: 32° 00.6'S (1)	STATION DESIGNATION: BROKEN HILL
LONGITUDE: 141° 28.0'E (1)	COUNTRY/STATE: Australia/New South Wales
ELEVATION: 285.9 METERS (1)	ADOPTED GRAVITY VÁLUE: g= 979 455.38 mgals
REFERENCE CODE NUMBERS: ACIC 3673-1	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the DCA Garages and Equipment Store, South aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

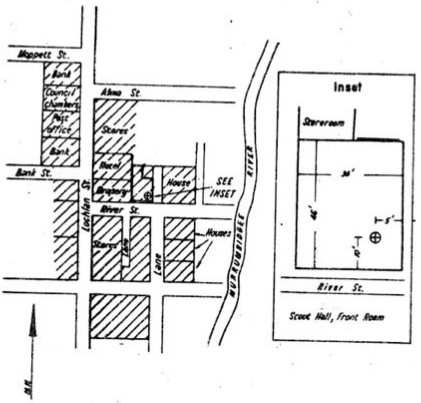
ACIC HQ FORM FEB 69 0-415

GRAVITY BASE STATION

LATITUDE 34° 30.8'S (1)	STATION DESIGNATION HAY
LONGITUDE 144° 50.8'E (1)	
ELEVATION 93.0 METERS (1)	COUNTRY/STATE Australia/New South Wales
REFERENCE CODE NUMBERS	ADOPTED GRAVITY VALUE
ACIC 3674-1	g = 979 671.92 mgals
	ESTIMATED ACCURACY ± 0.5 mgals
	DATE MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the front room of the Scout Hall, River Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

ACIC HQ FORM FEB 69 0-415

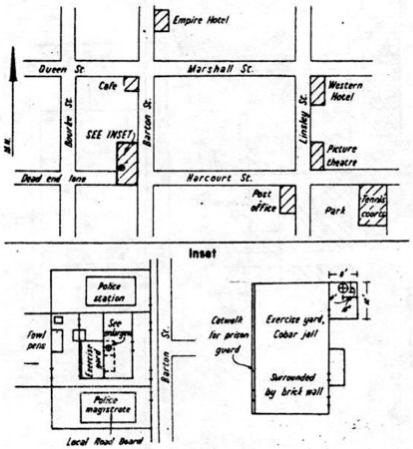
GRAVITY BASE STATION

LATITUDE: 31° 29.8'S (1)	STATION DESIGNATION: COBAR
LONGITUDE: 145° 49.5'E (1)	
ELEVATION: 242.9 METERS (1)	COUNTRY/STATE: Australia/New South Wales
REFERENCE CODE NUMBERS: ACIC 3675-1	ADOPTED GRAVITY VALUE: g = 979 396.37 mgals
ESTIMATED ACCURACY: ± 0.5 mgals	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a small room adjacent to the cellar at the Police Station, Barton Street.

(1)



(1)

REFERENCE SOURCE

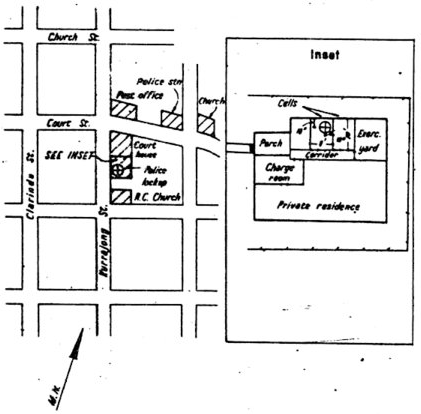
(1) 00751

GRAVITY BASE STATION

LATITUDE 33° 08.0'S (1)	STATION DESIGNATION PARKES
LONGITUDE 148° 10.6'E (1)	
ELEVATION 335.3 METERS (1)	COUNTRY/STATE Australia/New South Wales
REFERENCE CODE NUMBERS ACIC 3676-1	ADOPTED GRAVITY VALUE g = 979 509.99 mgals
	ESTIMATED ACCURACY ± 0.5 mgals
	DATE MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the center cell at the Police Station, Kurrajong Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

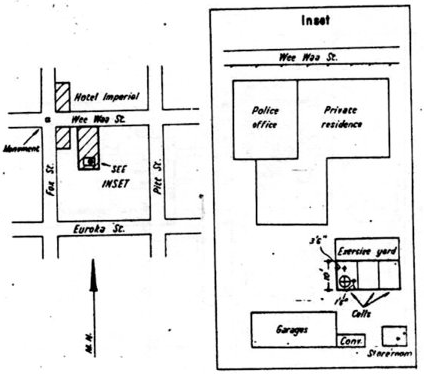
398

GRAVITY BASE STATION

LATITUDE: 30° 01.4'S (1)	STATION DESIGNATION: WALGETT
LONGITUDE: 148° 06.1'E (1)	
ELEVATION: 132.6 METERS (1)	COUNTRY/STATE: Australia/New South Wales
REFERENCE CODE NUMBERS: ACIC 3677-1	ADOPTED GRAVITY VALUE: g = 979 320.05 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a cell at the Police Station, Wee Waa Street. (1)



(1)

REFERENCE SOURCE

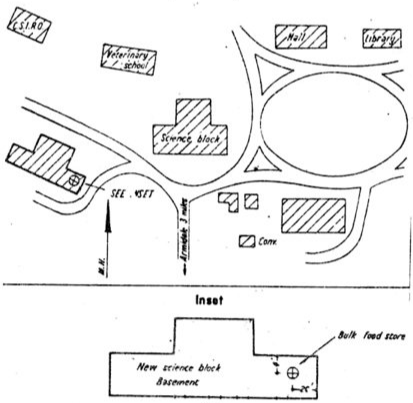
(1) 00751

GRAVITY BASE STATION

LATITUDE: 30° 29.1'S (1)	STATION DESIGNATION: ARMIDALE
LONGITUDE: 151° 38.9'E (1)	
ELEVATION: 1026.3 METERS (1)	COUNTRY/STATE: Australia/New South Wales
REFERENCE CODE NUMBERS: ACIC 3678-1	ADOPTED GRAVITY VALUE: g= 979 114.71 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In the new Science Block, New England University College. (1)



(1)

REFERENCE SOURCE

(1) 00751

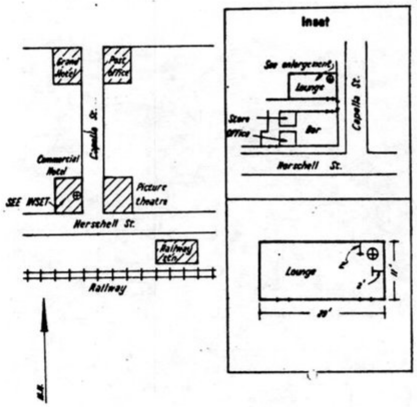
400

GRAVITY BASE STATION

LATITUDE 22° 49.0'S (1)	STATION DESIGNATION CLERMONT
LONGITUDE 147° 38.0'E (1)	
ELEVATION 267.6 METERS (1)	COUNTRY/STATE Australia/Queensland
REFERENCE CODE NUMBERS: ACIC 3679-1	ADOPTED GRAVITY VALUE: g= 978 776.34 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the lounge of the Commercial Hotel, Capella Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

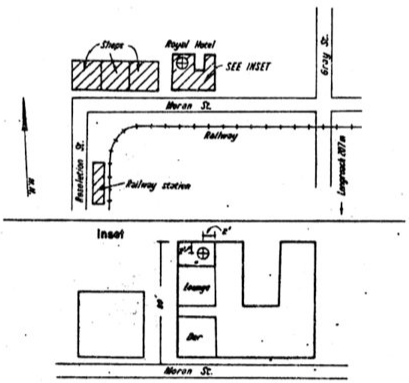
401

GRAVITY BASE STATION

LATITUDE: 20° 50.5'S (1)	STATION DESIGNATION: HUGHENDEN
LONGITUDE: 144° 12.0'E (1)	
ELEVATION: 328.0 METERS (1)	COUNTRY/STATE: Australia/Queensland
REFERENCE CODE NUMBERS: ACIC 3680-1	ADOPTED GRAVITY VALUE: g = 978 604.10 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE: MONTH/YEAR 8/70

DESCRIPTION AND/OR SKETCH

In a room next to the lounge of the Royal Hotel, Moran Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

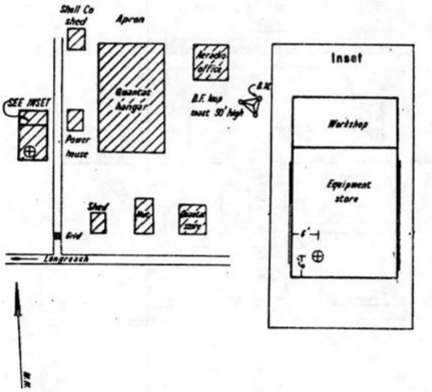
40V

GRAVITY BASE STATION

LATITUDE: 23° 26.5'S (1)	STATION DESIGNATION: LONGREACH
LONGITUDE: 144° 16.0'E (1)	
ELEVATION: 191.7 METERS (1)	COUNTRY/STATE: Australia/Queensland
REFERENCE CODE NUMBERS: ACIC 3681-1	ADOPTED GRAVITY VALUE: g= 978 789.74 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the Equipment Store at the aerodrome. (1)



(1)

REFERENCE SOURCE

(1) 00751

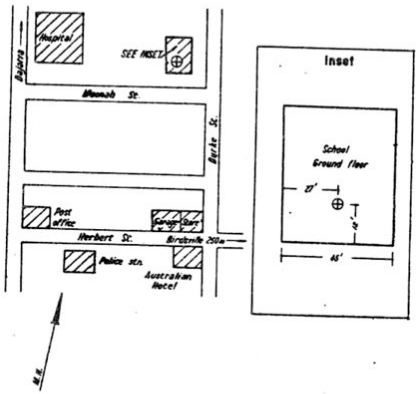
403

GRAVITY BASE STATION

LATITUDE: 22° 54.4'S (1)	STATION DESIGNATION: BOULIA
LONGITUDE: 139° 54.5'E (1)	
ELEVATION: 145.6 METERS (1)	COUNTRY/STATE: Australian/Queensland
REFERENCE CODE NUMBERS: ACIC 3682-1	ADOPTED GRAVITY VALUE: g = 978 791.84 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the School House, Moonah Street. (1)



(1)

REFERENCE SOURCE

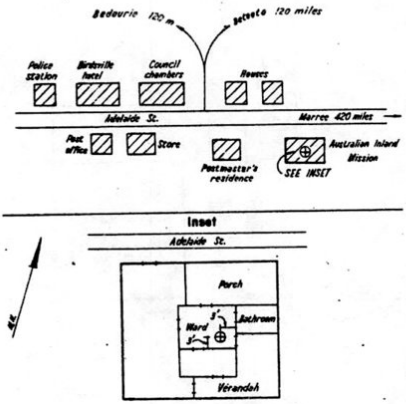
(1) 00751

GRAVITY BASE STATION

LATITUDE 25° 54.2'S (1)	STATION DESIGNATION BIRDSVILLE
LONGITUDE 139° 21.2'E (1)	
ELEVATION 47.9 METERS (1)	COUNTRY/STATE Australia/Queensland
REFERENCE CODE NUMBERS: ACIC 3683-1	ADOPTED GRAVITY VALUE: g = 979 002.98 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the ward of the Australian Inland Mission, Adelaide Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

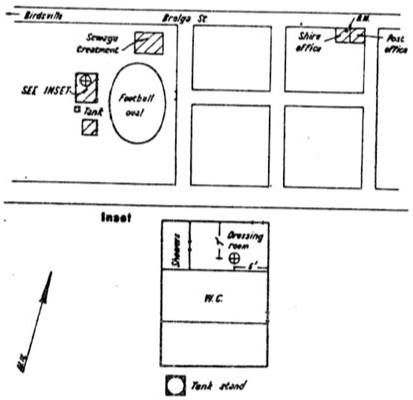
405

GRAVITY BASE STATION

LATITUDE: 26° 37.0'S (1)	STATION DESIGNATION: QUILPIE
LONGITUDE: 144° 16.0'E (1)	
ELEVATION: 196.6 METERS (1)	COUNTRY/STATE: Australia/Queensland
REFERENCE CODE NUMBERS: ACIC 3684-1	ADOPTED GRAVITY VALUE: g= 979 006.48 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In a dressing room at the Football Oval, Brolga Street. (1)



(1)

REFERENCE SOURCE

(1) 00751

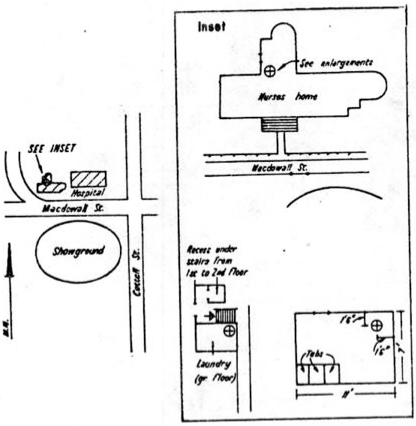
406

GRAVITY BASE STATION

LATITUDE: 26° 34.4'S (1)	STATION DESIGNATION: ROMA
LONGITUDE: 148° 46.5'E (1)	
ELEVATION: 321.3 METERS (1)	COUNTRY/STATE: Australia/Queensland
REFERENCE CODE NUMBERS: AOIC 3685-1	ADOPTED GRAVITY VALUE: g = 978 978.48 mgals
	ESTIMATED ACCURACY: ± 0.5 mgals
	DATE — MONTH/YEAR: 8/70

DESCRIPTION AND/OR SKETCH

In the laundry of the Nurses' Home, Macdowall Street. (1)



(1)

REFERENCE SOURCE

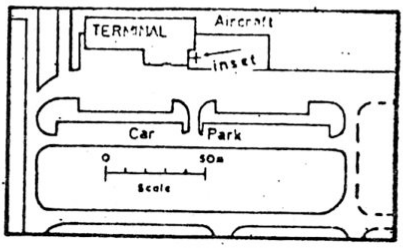
(1) 00751

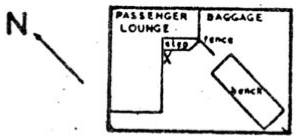
407

GRAVITY BASE STATION

LATITUDE: 42° 51'S (1)	STATION DESIGNATION: HOBART (LLANHERNE AP)
LONGITUDE: 147° 30'E (1)	COUNTRY/STATE: Tasmania
ELEVATION: 5 METERS (1)	ADOPTED GRAVITY VALUE: g = 980 449.4 mgals
REFERENCE CODE NUMBERS: ACIC 3687-1	ESTIMATED ACCURACY: ± 0.4 mgals
	DATE: MONTH/YEAR 12/69

DESCRIPTION AND/OR SKETCH





REFERENCE SOURCE

(1) 01504

408

APPENDIX A.4

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00751 DOOLEY, J.C., ET AL.
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