

15

3109

Permanent Proving Ground Trials  
C171 Th.

A8/233/CAA

27th November 1957

alc a/c  
25/11/85

Dear [redacted]

Blood counts at Maralinga

At the meeting of the Maralinga Board of Management held on 18.10.57, I raised the question of blood counts. At the Chairman's request a decision was deferred to allow the matter to be discussed between [redacted] and me. We held a discussion by telephone as a result of which I agreed to raise the matter again in U.K. from the medico legal aspect. After consultation with our Medical and Health Physics Divisions I now wish to continue to press for blood counts. The reasons are substantially those I gave at the Board meeting. U.K. has a responsibility under the Agreement with Australia for radiological safety at the Range. In the first instance we wish to exclude people with existing pathological conditions from the Range. In the second we wish to be able to demonstrate that this has been done in any case in which a claim for damage is made.

In order to reduce the amount of work to the minimum I withdraw my previous suggestion of classification of personnel based on time spent at the range by the following:-

- (a) Blood counts required before arrival on site.

- All members of Services.
- All scientific staff.
- All other civilians who will be required to work in active areas.

- (b) Blood counts not required before arrival on site.

- Civilians whose duties do not require them to enter active areas.

In the case of civilians who enter the range under (b) but are subsequently found to have a need to enter an active area a blood count would be required. Facilities should preferably exist for such examinations at Maralinga.

/In my

[redacted]  
 U.K.M.O.S.S.  
 339, Swanstone Street,  
 Melbourne,  
 Australia.

AB/233/CAA

27th November 1957

██████████,  
U.K.M.O.S.S.

Permanent Proving Ground Trials  
0171 Th

uk u/c  
25/1/85.

In my conversation with ██████████ he agreed that he would not oppose the request even though he thought it unnecessary from the Australian point of view. I believe therefore that he will agree with the above proposals, but I am in any case copying this letter to him.

In addition to blood counts, film badges would continue to be issued to all entrants to the Range.

I should be glad if you would raise this matter with the Board of Management. If it is agreed we shall include a suitable paragraph in the Maralinga Safety Regulations.

Hope you had a good visit here, and a better trip back than your outgoing journey.

All best wishes,

Yours ██████████

Copies to:- ██████████

17th July, 1957.

I enclose a schedule of new buildings, services, etc., which are likely to be required at Maralinga and in the United Kingdom if the balloon and hydrogen programme goes through. Also any schedule re certain other buildings and services which are likely to be required at Maralinga. This is a preliminary document and will be followed up by a further statement after we have had a chance to discuss it in Australia. You should note that we planned a hydrogen production plant at Maralinga, this I think, is most unlikely as it would undoubtedly require installation of a new 500 KVA generator bank in the main power station, at cost of the generator alone of about £20,000. However, this may tie up with a statement Blemfield has made that in any case a new 500 KVA turbine and still are required at Maralinga. In addition to the buildings listed in the schedule, there will almost certainly be some additional statements laid regarding modifications to Building DC 3 and some suggestions with regard to messing facilities in the village by Mr. Long and Mr. Chiverton at A.W.R.E.

Room [REDACTED],  
M.O.S.,  
St. Giles Court,  
London, S.W.1.

Copies to:- [REDACTED]

CONFIDENTIAL

New Buildings, Areas and Services Required at Maralinga by 31/7/58

<u>Serial No.</u>	<u>Building No.</u>	<u>Title and Function</u>	<u>First Estimate of Costs</u>	<u>Proposed Source of Material</u>	<u>Proposed Australian Contractor</u>	<u>Dimensions</u>	<u>Services Required</u>	<u>Completion Date</u>	<u>Remarks</u>
M1 - 6	BL25	Hydrogen Cylinder Storage Buildings	£44000	Australia	Dept. of Works	6 off, each	Lightning Protection Fire Mains Access Roads Mechanical Handling Equipment.	30/4/58 to 31/7/58	Dutch barn type buildings requested to provide shelter from sun and rain. Exposure to these elements causes serious leakage and deterioration of bottles.
M7	BL30	Inspection and Test Building	£ 2400	Australia	Dept. of Works	410sq. ft.	Electrical, Water, Sewage, Telephone, Fire Mains Lightning Protection Access Roads	30/4/58	Small steel frame, CGI clad building providing facilities for checking purity and water content of hydrogen under storage at Maralinga. Routine checks of this nature are necessary both for safety and economy of gas and bottles. The building also contains a small store and an office for the records associated with hydrogen storage, and, if necessary, production.
M8 - 11	BL27, 28, 31,	Hydrogen Production Building Plant and filling bay	£82500	1. U.K. 2. Australia	1. Dept of Works 2. Australia	Not Applicable	Electrical Ventilation Water Steam Sewage Fire Mains Vacuum Compressed Air Telephone Gantries Staticord Lightning Protection Access Roads	30/4/58	These buildings contain electrical transformers and rectifiers, hydrogen cells, gas washing plant and compressors with overhead gantries for handling cells. Associated with the main building is a 40000 cu. ft. gas holder and gas drying plant. The plant produces about 40000 cu. ft. of hydrogen per 20 hour day. It is planned for continuous operation as a load balancing device across the power station. Also adjacent is a small filling bay, capable of filling two trailer loads of cylinders at once.
M12	BL29	Cylinder Maintenance Building.	£18000	Australia	Dept. of Works	2600 sq. ft.	Electrical Water Steam Fire Mains Sewage Vacuum Compressed Air Telephones Mechanical Equipment Lightning Protection Access Roads	30/4/58	This building is required for carrying out the routine inspection, checking and maintenance of gas cylinders. This has to be completed once every five years. This building is designed to carry out this task spread evenly over the five years. To complete the task by use of industry will cost approximately £17,000 per annum.
M13	BL33	Services For BL	£ 5000	Australia	Dept. of Works	Not Applicable	Electrical Water Steam Sewage Telephones Fire Mains	30/4/58 to keep pace with serials 1 to 12 above	Connections to the existing services at Maralinga. The largest single item is likely to be for fire mains throughout the area. If Serials are not carried out this figure will fall to £4000.
M14-15	BL 23, 32	Access Roads and Fencing	£10000	Australia	Dept. of Works	Not Applicable	Roads and Fences	30/4/58 to 31/7/58 to keep pace with serials 1 to 12 above	About 1000 yards of access roads and about 300 yards of fencing. Roads are necessary to allow cranes and trailers to handle cylinders and the area must be fixed as a safety precaution. If Serials M8 - 12 are not included there will be only a small reduction in this figure as the buildings in Serials are close to existing roads.

C O N F I D E N T I A L

<u>Serial No.</u>	<u>Building No.</u>	<u>Title and Function</u>	<u>First Estimate of Costs</u>	<u>Proposed Source of Material</u>	<u>Proposed Australian Contractor</u>	<u>Dimensions</u>	<u>Services Required</u>	<u>Completion Date</u>	<u>Remarks</u>
M16	Test Area	Balloon Flying Sites Tufi Taranaki Site 3 Site 4	£60000 approx.	1. U.K. 2. Australia	Dept. of Works	Not Applicable	Electrical Access Roads	30/6/58	Permanent Flying Sites based on universal layout for flying altitudes 1000 to 2000 ft and normal altitude 1500 ft. Amount of work and number of sites required cannot be known until after Antler. At least 3 sites will be required and probably 4. Of these if all goes well at Antler, it should be possible to reuse Tufi and Taranaki by rebuilding the outer ring of flying points and resurfacing the central points and central roads.
M17	BL26	Balloon and Equipment Store/Fabric Workshop/Generator Workshop	£40000	Australia	Dept. of Works	6500 sq. ft.	Electrical Ventilation Fire Mains Telephone Mechanical Handling Equipment Access Roads	30/6/58	This building carries out two functions. (1) During a trial it is a store for balloons and equipment and is a workshop for balloon fabric and rigging. (2) During intertrial periods it continues to function as a balloon and equipment store, but the fabric workshop becomes a workshop for overhaul of generators which require action at Maralinga, for which there is now no provision elsewhere. The building is a large metal frame CGI clad structure with a conditioned balloon and fabric store at one end.
M18 - 19	Iwara 1, 3	Balloon Filling Beds	£ 8,000	Australia	Range Support Unit	Not Applicable	Electrical	30/6/58	One filling bed each for 110,000 cu. ft. and 160,000 cu. ft. Balloons, by additions to existing balloon storage points.
M20	BW 6.2	Inflammables & Corrosives Store							COMPLETED
M21	BW 6.3	Scientific Storehouse	£20000	Australia	Dept. of Works	5000 sq. ft.	Electrical Fire Main Telephone	As soon as possible (30/9/57 already requested)	The first of 4 additional urgently required store houses for scientific stores and equipment. Used for storing equipment between trials and dummy preparation phases. In addition contain bulk component stacks for withdrawal during trials. At present stored in open air in open crates and boxes or in unloaded lab and office buildings where equipment is subject to weather deterioration and petty pilfering.
M22	BW 6.7	Scientific Stores Compound							COMPLETED
M23	BL 8.8	VHF Radio Room (Transport Net)	£ 650	Australia	Dept. of Works	100 sq. ft.	Electrical Ventilation Telephone	30/6/58	Small building contains the central station for all vehicle radio sets working on the Transport VHF net. Used both operationally and throughout the year.
M24	BL 8.9	VHF Radio Room (Yellow Net)	£ 650	Australia	Dept. of Works	100 sq. ft.	Electrical Ventilation Telephone	30/6/58	Small building contains the central station for all vehicle radio sets working on the Yellow (Radioactive) VHF net. Used both operationally and throughout the year.

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<u>Serial No.</u>	<u>Building No.</u>	<u>Title and Function</u>	<u>First Estimate of Costs</u>	<u>Proposed Source of Material</u>	<u>Proposed Australian Contractor</u>	<u>Dimensions</u>	<u>Services Required</u>	<u>Completion Date</u>	<u>Remarks</u>
M25	BL 2.4	Scientific Laboratory Block	£13000	U.K.	Dept. of Works	3700 sq. ft.	Electrical Ventilation Telephones	30/6/58	A new block of small laboratories is urgently required to meet current demands for laboratory and computing space, report writing, round assessment and reading. The existing accommodation is too small for Antler and hopelessly inadequate for a trial the size of Buffalo. At Buffalo scientific staff spread into Range Staff offices, which are now field by the rightful occupants.
M26	HA 1.1	Forward Area Store	£25000	Australia	Dept. of Works	5000 sq. ft.	Electrical Telephone	As soon as possible 30/4/58	Forward stores marshalling shed with collapsible sides and ends. This shed is required urgently to act as a storage point for items of scientific stores and engineering equipment used in forward areas. The shed will house those stores liable to damage by the elements or to loss by petty pilfering, or those stores which it is impracticable to recase and which require protection.
M27	HA 1.2	Forward Area Stores Compound	£ 600	Australia	Dept. of Works	100 yds x 100 yds approx.	Electrical	As Soon as possible 30/4/58	Forward Area stores compound for sorting and checking stores in transit and for storage of large cased and uncased items not affected by weather etc.
M28	BL 14.2	Tech. Services Store							COMPLETED
M29	BL 9.2	Photographic Store							COMPLETED
M30	BL 14 Equipment BW 7 Switchboard and Laboratory Sub Station B	Modification to Stabilised Power Supply	£3000	U.K.	1. Dept. of Works 2. Range Support Unit		Electrical	31/5/58	This modification will enable the stabilised power supply to be run from the normal mains via a switching station at BL 14. A high voltage overhead line or underground cable, and a 6.6 KV/415 v Transformer will be required together with some modifications to existing switch boards in BW 7 and Lab Sub Station B. This modification will release 4 shift hands during a trial, and will result in a large decrease in inter-trial maintenance running considerably easier. Tests to be carried out at Antler may well reduce the cost of the conversion by perhaps as much as £2000.
M30 - 34	FC 21, 22 24, 25	Forward Area Group Stores/ Laboratories	£9000	Australia	Dept. of Works	40 ft. each 16' x 30'	Electrical	As soon as possible (15/8/57 date already requested)	A block of 4 open ended sheds to be used for group laboratories and for storage of bulk group equipment during inter-trial periods, where such equipment is too large or well protected to suffer damage or pilfering but still requires protection from the sun and rain. These are required as soon after Antler as possible.

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<u>Serial No.</u>	<u>Building No.</u>	<u>Title and Function</u>	<u>First Estimate of Costs</u>	<u>Proposed Source of Material</u>	<u>Proposed Australian Contractor</u>	<u>Dimensions</u>	<u>Services Required</u>	<u>Completion Date</u>	<u>Remarks</u>
M35	XA Area	Modifications to Ventilation XA 1.1, 1.2, 2.2 and 2.1	£5000	U.K.	Dept. of Works		Electrical Ventilation	30/6/58	To continue the present scheme of alterations to the ventilation system in the Magazines, to give automatic temperature control at 67° F ± 2° F, at which temperature all components have been manufactured and at which temperature their metrology is known. To date auxiliary heating has been installed in XA 1.1 and 1.2 as a temporary measure with the resultant loss of a huge area of working space in buildings already operating above capacity.
M36	BL 4	Modification to Ventilation	£5000	U.K.	Dept. of Works		Electrical Ventilation	15/7/58	The existing ventilation in Building BL 4 is inadequate for newly developed spectral equipment which requires a constant low operating temperature. Lack of this facility has resulted in the loss of valuable records concerned with weapon performance and yield. The alterations will enable cool or warm air as required, to be fed to the individual machines concerned.
M37	HA 3	Forward Area Lunch Room	£10000	Australia	Dept. of Works	2000 SQ. FT.	Electrical Water Drainage	31/7/58	Forward Area Luncheon Room to cater for scientific and Support Unit staff working in the Test Area. This replaces tentage used at Mina during Buffalo. In its proposed location the Lunch Room will be of use as an ORs mess during inter-trial periods.
M38	HA 4	Forward Area Offices	£100	Australia	Dept. of Works	300 SQ. FT.	Electrical	31/5/58	3 small offices/workrooms replacing 3 larger at Mina used during Buffalo. They will be used as small field offices by the various groups giving services to the scientists in the Test Area and will give a much wanted service which due to due to enforced staff shortages could only be partly carried out at Buffalo.
M39 - 41	BW 6.4, 6.5, 6.6	Scientific Stores Buildings	£60000	Australia	Dept. of Works	5000 SQ. FT. EACH	Electrical Fire Mains Telephones Access Roads	31/7/58	The last 3 of 4 additional storehouse for scientific stores. Used for storing equipment between trials and during preparatory phases. In addition contain bulk component stores for withdrawal during trials. At present stored in open air in open crates and boxes or in unloaded lab and office buildings where equipment is subject to weather deterioration and petty pilfering.
M42	LA Modification	Toilet Facilities	£ 500	Australia	Dept. of Works		Electrical Water Sewage	31/7/58	Modification to an existing building and service to bring it up to a standard recommended by the medical officer. This building provides toilets and latrines for about 10 - 30 persons during trial periods.
M43	RB 7	Active Sample Store	£ 500	Australia	Dept. of Works		Electrical	31/7/58	A small well type store for radioactive biological and fallout samples. The presence of this store will increase measurement accuracy and save staff, time and vehicular movement.

If it is decided not to install a hydrogen generating plant at Haralinga, then Serials 8 to 12 will not be required.

N.B. No costs allowed here for Department of Work Departmental Expenses and fees (16%) - Add say £60,000.

## NEW EQUIPMENT REQUIRED BY 31.7.58. FOR BALOON TRIALS AT MARALINGA

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Serial No:	Item	Quantity	First Estimate of Costs	Delivery Date	Short functional Specification	Suggested Source of Supply	Remarks
E1	Gas Cylinders	4700	£171,500	Phased from 31.12.57 - 30.4.58	Capacity 510 cu. ft. at 3600 p.s.i. under standard conditions.	1. Chesterfield Tube Co., Derbyshire. <u>or</u> 2. European Steel Pool	Additional Gas cylinders to complete 1 years stock
E2	Hydrogen	2,397,000 cu. ft.	£9000	Phased from 7.1.58 - 30.4.58	To fill bottles in serial 1	1. Stavely Iron Co., Chesterfield or R.A.F. M.U., Cardington.	Additional hydrogen to fill above cylinders.
E3	Compressors *	3	£8,600	30.4.58 at Site	Capacity 1250 cu. ft. hv to 3000 p.s.i. each	U.K. Contractors to be chosen - probably Reavills or Broome Wade	On loan to C.I.G. Phg. Ltd. to enable cylinders to be filled to capacity.
E4	Gas Driers *	3 + reactivation unit	£8000	30.4.58 at site (14/2/58 ex U.K.)	Capacity 1250 cu. ft. p.hr. at 3600 p.s.i. each	"Burlec" Ltd., Birmingham (Proprietary article)	On loan to C.I.G. Phg. Ltd. to enable gas to be dried before entering cylinders for economy and safety.
E5	Hydrogen =	1,377,000	£7,176	Phased from 30.4.58 to 30.6.58	To fill 2700 by 510 cu. ft. bottles at 3000 p.s.i. already at Maralinga	C.I.G. Phg. Ltd., Sydney, Australia.	Refill existing cylinders.
E6	Cylinder RACKS	784	£6,300	Phased from 31.1.58 to 31.4.58	To fit bottles Serial E1	E. C. Payton & Co., Ltd., Tipton, Staffs.	Additional Cylinder racks to fit new cylinders <b>above</b> , to make for easy handling and minimum storage space.
E7	Cylinder Connections	Sets for 1234 blocks of Cylinders	£10,500	Phased from 31.1.58 to 30.4.58	To fit 4700 bottles, serial E1 and 2700 already at Maralinga	U.K. Contractors to be chosen	Connections joining cylinders into blocks of 6 and thence into trailer units of 60, to cut down filling and operational man power requirements.
E8	Cylinder Handling Crane	1	£2,500	<u>As soon as possible not later than 31.3.58 in Maralinga</u>	1 ton Capacity at 6 ft with 13 ft clearance and 1 ton at 9 ft, clearance 7ft 6in.	British Crane & Hoist Co., Compton, Berks.	Small, low clearance, non slewing stores yard crane for full time use in cylinder stores handling area. To be capable of towing cylinder <b>trailers</b> .
E9	Balloon Site Crane	1	£8,500	15.7.58 (to be available in U.K. 30.4.58)..	5 ton Capacity, Power slew, lift and lower. 30 ft. Jib. To operate on roads or compacted areas.	Steels Engineering Co., Ltd. (Coles Crane)	5 ton capacity, power operated Coles type crane for use at balloon sites throughout each operation, full time commitment. Could be used elsewhere during inter trial periods. <u>N.B. Tests at Antler may reveal a suitable crane already available.</u>
E10	Modifications to Winches	4	£8,000	15.7.58	Modifications to existing Winch Vehicles to enable them to operate 8ton Winch wires and to operate with 10 ton upwind lift over rear wheels	Messrs. Wilde, U.K. (Proprietary article) and sub-contractors. Fitting for S. and T., Dept. of Supply, Adelaide.	Modifications are required to existing winch vehicles to enable them to operate 8 ton winch wires required for the new balloon tests and to handle 160,000 cu ft. and 110,000 cu ft. balloons.
E11	Packing, Shipping and Transport for the above from U.K. to Australian destination.		£75,000 approx.	Phased from 15.1.58 to 10.5.58 ex U.K. At Maralinga by 31.7.58	U.K. to Maralinga	1. Gas by Mov. 3, Air Ministry 2. Other items by M.O.S. and A.E.A. Agents 3. In Australia by S. and T., Dept. of Supply and Commonwealth Railways 4. At Maralinga by Range Support Unit,	



Serial No:	Item	Quantity	First Estimate of Costs	Delivery Date	Short functional Specifications	Suggested Source of Supply	Remarks
E12	Maintenance and Testing Existing cylinders	1,480	£14,800 approx.	Phased from 30.4.58 to 30.6.58	To A.W.R.E./R.A.F. Spec.	G.I.G. Pty. Ltd.	Cylinders must be tested, checked and undergo maintenance every 5 years at least. This is the first batch on a 5 year phased programme.
E13	Transport of existing gas cylinders to maintenance and refilling		£24,800	Phased from 31.3.58 to 31.7.58 at Maralinga.	Maralinga to Melbourne to Maralinga	Range Support Unit, Commonwealth Railways, S. and T., Dept. of Supply.	
E14	Heavy Caterpillar D8 Tractor under ballast	1 + 1 spare	£23,000	15.7.58	To haul 21 tons dead weight	U.K.	Heavy tractor is required for handling Balloon systems prior to coming under Scammell control. This may be available from Range resources.
E15	Additional Ballast for Scammell Constructions (Pig iron)	2	£600	15.7.58	To haul 14 tons dead weight and if possible 21 tons. To operate with 10 ton upward lift over rear axle.	Australian sources	Additional ballast required to enable existing Scammell tractors to handle 110,000 and 160,000 cu. ft. Balloons

N.B.1 If hydrogen is to be produced at Maralinga the items E3, E4, E5 and E13 will not be required.

N.B.2 No costs allowed here for any departmental charges (16%) made by the Australian Dept. of Works for any work carried out by them - say £1,000

Balloon System Requirements

Serial No:	Item	Quantity	Approximate First Estimate of Costs	Delivery	Through R.A.E., Farnborough
B1	Balloon system, 3 wire, for load of 8,000 lb. to heights between 1,000 ft. and 2,000 ft. - optimum height for stability 1,500 ft.	7	£450,000	Prototypes 30.11.58 and 31.12.57. Final delivery 30.4.58.	4 systems from M. L. Aviation Co., Ltd. 3 systems from either Vickers or Saunders-Roe
B2	Prototype systems, single wire, for lift of 10,000 lb. to 5,000 ft.	1	£80,000	31.10.58	Vickers or Saunders-Roe
B3	Prototype system, 3 wire, for lift of 10,000 lb. to 5,000 ft.	1	£120,000	30.11.58, using common components from B2.	Vickers or Saunders-Roe

Balloon Requirements at Cardington

Serial No:	Item	Quantity	Approximate First Estimate of Costs	Delivery	Specification	Supplier
C1	All weather omni-directional flying bed at R.A.F., Cardington, with tracks and hut	1	£25,000	15.10.57	Balloon flying bed for all directions and all weathers for 1,000 - 2,000 ft. and 5,000 ft. systems for prototype tests and practice flying in U.K.	U.K. Contractor and M.L. Aviation Co., Ltd.
C2	Balloon Site Crane, 5ton Capacity, Power lift, lower and slew 30 foot jib.	1	£8,500	30.10.57	To lift 5 tons at 6 ft with 24 ft. height clearance.	Steels Engineering Co. (Coles Crane).
C3	Balloon Winches on Leland Hippo. Chassis ballasted.	4	£28,000	30.10.57	To haul 8 tons deadweight. Modified Wilde Winches, and to operate with 10 ton vertical lift over rear axles.	R.A.F. Stocks and U.K. Contractor
C4	Balloon Towing Vehicles	2	£19,000	30.10.57	To haul 14 tons deadweight (21 tons if possible) and to operate with 10 ton lift at rear	Scammel Constructor with 06 engine and with Vertical spindle winch.
C5	Balloon handling Tractor	1 + 1 spare	£22,000	30.10.57	To haul 21 tons deadweight.	Caterpillar D6 Tractor from U.K. Agents or Service stocks.
C6	V.I.F. Network		£2,000	30.10.57	Fitted to 9 vehicles, 2 searchlights, 1 distant station, 2 Walkie-Talkies and master station. Range 10 miles.	A.W.R.E.
C7	Searchlight and Generator	2	£14,000	30.10.57	For illumination of balloon systems during test flying and prototype tests, and during practices.	War Department Stocks.

N.B. All the above equipment, C1 to C7 should, it is suggested, be on charge to the T.B.U., R.A.F., to be operated to them, and to be identical with the similar equipment at Maralinga.

Science Palace, Gammis - 121

MIRIAMEN

List of Buildings and their functions at Hraalings

LA Area - Local Airstrip

- LA 1 Airfield runway etc.
- LA 2 Air Traffic Control Tower and Signals Room.
- LA 3 Passenger and Freight handling and Equipment Store.
- LA 3.1 Sewage Disposal from LA3 and LA24.
- ( LA5 Hard Standing and Wash Down.
- ( LA5.1 Store for Aircraft Decontamination.
- ( LA5.2 Sample Laboratory.
- ( LA6 Laboratory and Change Room.
- ( LA6.1 Water Storage.
- ( LA6.2 Toilet accommodation.
- ( LA6.3 Crew room, Offices and Store.
- ( LA7 Disposal of Radio Active Effluent.
- ( LA8 Safety fence around LA5 and LA6 Areas.
- LA9
- ( LA10 Store and Assembly Building.
- ( LA10.1 Ventilation Plant for LA10.
- ( LA11.1 Electronics Test and Assembly.
- ( LA11.2 Electronics Laboratory, Office and Workshop.
- ( LA11.3 Hardstanding.
- ( LA11.4 Battery assembly and charging.
- ( LA11.5 Ventilation plant for LA11.1 and LA11.2.
- ( LA12 Security Office and tea room.
- ( LA13 Generator Shed.
- ( LA14 Security fence for LA10 Area.
- ( LA16 Toilet accommodation.
- ( LA16.1 Water storage.
- ( LA17 Water storage at LA5.
- ( LA18 R.A.F. Sqdn. Offices and stores.
- ( LA19 R.A.F. Air Staff.
- ( LA20 Crash Station.
- ( LA21 R.A.F. M.T. Garage.

Terminal  
Buildings  
Area.

List of Buildings and their functions at Maralinga

LA Area - Local Airstrip

Terminal  
Buildings  
Area

LA22	Fuel Installations for Aircraft.
LA23	R.A.F. H.Q. Offices.
LA24	Lavatory Accommodation.
( LA25	M.T. Filling Point
( LA26	Aircraft Monitor Store and Workshops
( LA27	Emergency F.A.P.
LA28.1, 28.2, & 28.3	Senior Officers Sleeping quarters
LA29.1	" " Ablution and Lavatory
LA29.2	" " Laundry
LA30.1, 30.2, & 30.3	Junior Officers Sleeping quarters
LA31.1	" " Ablution and Lavatory
LA31.2	" " Laundry
LA32.1 to 32.9	Airmens Sleeping quarters.
LA33.1, 33.2	" Ablutions and Lavatories.
LA33.3	" Laundry
LA34.1, 34.2	NCO's Sleeping quarters
LA35.1	" Ablution and Lavatory.
LA35.2	" Laundry
LA36	Airmens Canteen
LA37.1	Kitchen
LA37.2	Officers Mess
LA37.3	NCO's Mess
LA37.4	Airmen's Mess
LA38	Water Storage (200,000 gallons)
LA39.1	Sewage Disposal Septic tank.
LA39.2	Sewage Disposal pumphouse.
LA40	Football field etc.
LA41	Transformer Sub station
LA42	Car Park
LA43	Bedding store.

List of Buildings and their functions at Maralinga

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FC Area - Forward Control Roadside

FC1.1	Aerial Array
FC1.2	Pressure Vented Hut, Control Building
FC1.3	Pressure Vented Hut, Laboratory
FC1.4	Pressure Vented Hut, Laboratory
FC2	Pressure Vented Hut, Laboratory
FC2.1	Aerial Tower
FC2.2	Aerial Tower
FC3	Pressure Vented Hut, Laboratory
FC3.1	Aerial Tower
FC3.2	Aerial Tower
FC4.1	Pressure Vented Hut, Laboratory and Office
FC4.2	Pressure Vented Hut, Telephone exchange
FC5	Pressure Vented Hut, Laboratory
FC6	Pressure Vented Hut, Laboratory
FC7	Pressure Vented Hut, Laboratory
FC7.1	Aerial
FC8	Pressure Vented Hut, workshop
FC9	Met. Store
FC9.1	Theodolite post
FC10	Pressure vented Hut, Officers' Mess
FC11	Pressure Vented Hut, Sergeants Mess
FC12	Pressure Vented Hut, Other Ranks Mess
FC14.1	Toilet Accommodation, Officers
FC14.2	Toilet Accommodation, Sergeants
FC14.3	Toilet Accommodation, Other Ranks
FC15	Group Workshop
FC16	Group Workshop
FC17	Group Workshop
FC18	Group Workshop

List of Buildings and their functions at Haralinga

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FC Area - (continued)

FC19	Group Workshop
FC20	Group Workshop
FC21	Group Workshop
FC22	Group Workshop
FC23	Generator Store
FC24	Group Workshop
FC25	Group Workshop
FC31	Generator Store
FC32	Generator Store
FC34	Isotope Store
FC35	Waste Disposal for FC14
FC36	Security Hut
FC36.1	Barrier
FC36.2	Barrier )
FC36.3	Barrier ) On by-pass road
FC37	Observers Stand
FC38	R.A.P.
FC39	Water storage tower
FC1.1	Camera tower
FC1.2	P.V.H. Laboratory
FC1.3	Stores Hut
FC39	Water Tower (4,000 gallons)
FC40	PWH 14 x 21
FC41	PWH 14 x 21
FC42	PWH 28 x 21

Forward Area

HL1.1	Forward Store
HL1.2	Compound
HL2	Workshop
HL3	Lunch Room
HL4	Offices Forward Area
HL5	

List of Buildings and their functions at Baralinga

WS Area - Watson Station

WS1	Transit Store
WS1.1	Nissen Store S
WS1.2	Nissen Store N
WS2	Toilet accommodation (South of Railway)
WS3	Generator Shed
WS4	Living accommodation
WS5	Mess and toilet accommodation
WS6	Wiles Living Accommodation and P.M.G. Store
WS7	Water Storage
WS8	Fuel Storage (Shell)
WS9	Sewage Disposal from WS5
WS10	Incinerator
WS11	Spare Messing Block
WS12	Transit Magazine



List of Buildings and their functions at Maralinga

KA Area - Minor Trials Area (Kittens/Rats)

KA1	Laboratory and Offices
KA2	Health Physics Laboratory
KA3	Magazine
KA4	RA Store
KA5	HE Assembly
KA6	Benzine Store
KA7	Lunch Room
KA7.1	Water Tank (400 gallons)
KA8	Security lodge and store
KA9	Generator Standing (General Area)
KA9.1	Generator Standing (H.P. Building)
KA10	Toilet Accommodation
KA11	Mobile Hut
KA13	Sump (for KA7)
KA13.1	Sump (for KA2)
KA14	Security Fence
KA20	Laboratory and Store

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List of Buildings and their functions at Maralinga

TM Area - Minor Trials Area (TMA)

TM1	Laboratory, Office, Mess and Radio Active Store
TM2	Generator Shelter
TM3	Field Toilet Accommodation
TM4	Steel Cubes
TM5	Concrete Firing Boxes
TM6	Security Fence for TM1
TM7	Radio Active Effluent Disposal from TM1

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List of Buildings and their functions at Maralinga

RB Area - Radio-Biological Area

RB1	Radio-Biological Laboratory and Plant Room
RB2	Laboratory
RB3	Animal House
RB4	Fodder store
RB5	Fencing for RB area
RB6	Dingo and Rabbit Proof Fence and lighting for same
RB7	Active sample store

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List of Buildings and their functions at Maralinga

DC Area - Decontamination Centre

DC1	Equipment Hut and Washdown
DC2	Garage and Store for Contaminated Vehicles
DC3	Active laundry transit store
DC3.1	Transformer Sub Station
DC4	Laundry for Contaminated Clothes
DC5	Record Reading, Decontamination Laboratory and Changing Rooms
DC6	Storage for Radio Active Equipment
DC7	Disposal of Radio Active Effluent for DC & RB areas
DC8	Sewage Disposal for DC & RB areas
DC9	Water Storage (4,000 gallon tank on tower)
DC10	Fencing for DC area
DC11	Solvent store
DC12	RA Extraction building
DC12.1	Concrete labyrinth and filters
DC12.2	Air delay tanks and stack
DC12.3	Air Sampling Unit
DC12.4	Fencing for DC12 area and road blocks

List of Buildings and their functions at Maralinga

BQ Area - Base Quartering

BQ1	24 V.I.P.s sleeping accommodation (F)
BQ2	216 Officers' sleeping accommodation (A,B,C,D,E,G,H,I,J)
BQ3	108 Officers' sleeping accommodation (K,L,M)
BQ4	108 N.C.O.s sleeping accommodation (N,O,P)
BQ5	360 Other Ranks sleeping accommodation (Q,R,S,T,U,V,W,X,Y,Z, ZO,YO)
BQ6.1	Director's Ante Room
BQ6.2	Director's Dining Room
BQ6.3	Kitchen (Officers Mess)
BQ7.1	Officers' Ante Room (S)
BQ7.2	Officers' Dining Room (S)
BQ8.1	Officers' Ante Room (N)
BQ8.2	Officers' Dining Room (N)
BQ9.1	Officers' Recreation Room (S)
BQ9.2	Officers' Recreation and Bar (N)
BQ9.3	Officers' Beer Garden (S)
BQ9.4	Officers' Beer Garden (N)
BQ10.1	Other Ranks Dining Room
BQ10.2	Kitchen (O.R.s and N.C.O.s)
BQ10.3	N.C.O.s Dining Room
BQ10.4	Wiles Cookhouse
BQ10.5	Wiles Ablutions
BQ10.6	Dining Extension (O.R.s)
BQ11	L.C.O.s Recreation and Bar
BQ11.1	N.C.O.s Beer Garden
BQ12	Other Ranks Recreation and Bar and Canteen
BQ12.1	O.R.s Beer Garden
BQ12.2	Canteen Extension (O.R.s)
BQ13	Cinema
BQ14	Hospital

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List of Buildings and their functions at Maralinga

BQ Area (continued)

BQ14.1	X-Ray and dark room buildings
BQ15	Tennis Courts, etc.
BQ16	Sewage Disposal
BQ17	Swimming Pool
BQ17.1	Plant Room for Swimming Pool
BQ18	Mess Staff Dining Room and bakery
BQ19.1	Officers' Bedding Store (West)
BQ19.2	Bedding Store (East)
BQ20	Stores and Cold Room (Messing block)
BQ20.1	Messing Block Ration Store
BQ21	Refuse Disposal Plant (Incinerator)
BQ22	Clothes Drying Posts
BQ23	Police Station
BQ24	Toilet Accommodation, Wiles area

List of Buildings and their functions at Maralinga

<u>BW Area</u>	<u>Base Workshous</u>
BW1	Engineering Workshop
BW1.1	Fencing for Motor Park
BW1.2	Caustic Soda store
BW1.3	Caustic Soda store
BW1.4	M.T. Office
BW1.5	Water Storage (4,000 gallons) (at BW1)
BW1.6	Workshop annexe (still to be decided upon)
BW1.7	M.T. Stores
BW2	Carpenters Shop
BW2.1	Timber Shelter
BW4	Battery charging room
BW5	Scientific Equipment Issue Store
BW5.1	Scientific Store
BW5.2	Fencing Scientific Stores
BW6	Bulk Store Scientific Equipment
BW6.1	Fencing Scientific Stores
BW6.2	Dangerous Chemical Store
BW6.3	Scientific Stores
BW6.4	Scientific Stores
BW6.5	Scientific Stores
BW6.6	Scientific Stores
BW6.7	Scientific Stores compound
BW7	Power House
BW7.1	Ventilation Plant (power house)
BW7.2	Office
BW7.3	Hot Well and Boiler Feed Pumphouse
BW7.4	Water Chilling and Pumphouse
BW7.5	Warm Water Storage tank
BW7.6	Hot Water Storage tanks
BW7.7	Static Water Storage
BW7.8	Power Station boiler and evaporator area
BW8.1	Water Storage for Village (main) (50,000 gallons)
BW8.2	Water Storage for Mess area (4,000 gallons)

List of Buildings and their functions at Maralinga.

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PW Area (continued)

BW8.5	Water Storage, other ranks sleeping accommodation (4,000 gallons)
BW8.4	Water Storage (Reserve) (300,000 gallons)
BW9	Shop
BW9.1	Post Office
BW10	Engineers' Store Fencing
BW10.1	Clerk of Works
BW10.2	Electricians' Shop
BW10.3	D.C.R.E. Store
BW10.4	Central Engineer Store (E. and H.)
BW10.5	D.C.R.E. Store
BW10.6	Plumbers' Shop
BW10.7	Central Engineer Store (Civil)
BW10.8	Engineer Stores Yard
BW11	Bulk Cold Storage and Canteen Stores
BW12	Fencing for Power Station
BW13	Filling Station for wheeled vehicles
BW13.1	Filling station for tracked vehicles
BW14	Fire Station
BW14.1	Static Water Storage
BW15	P.M.G. Linesman's Store
BW15.1	P.M.G. Office
BW15.2	Static Water Storage
BW15.3	Fencing P.M.G. Yard
BW16	Barrack Store
BW17	Armoury and Quartermaster's Store
BW17.1	Fencing for Quartermaster's Compound
BW18	Maintenance Yard (Power Station) Fencing
BW18.1	Ventilation and Refrigeration
BW18.2	Heavy mechanical and electrical
BW18.3	Plumbers
BW18.4	Electricians (Overhead and domestic) (formerly BW2)
BW18.5	Power Station Pipe Store (formerly BW2.1)
BW18.6	Static Water Storage



List of Buildings and their functions at Marilinga

BW AREA (Continued)

BW19:  
BW20  
BW21 Toilet Accommodation  
BW22 Raw Water Storage  
BW22.1 Plant House  
BW23 Fuel Storage for BW7  
BW23.1 Pumphouse for BW23  
BW23.2 Fuel Tank (West)  
BW23.3 Fuel Tank (East)  
BW24 Cooling Tower for BW7  
BW24.1 Cooling Tower pumphouse  
BW25.1 Substation (750 KVA)  
BW25.2 Substation (500 KVA)  
BW25.3 Substation (250 KVA)  
BW25.4 Substation (750 KVA)  
BW 25.5 Substation (500 KVA)  
BW26  
BW27 Mines Department Store  
BW27.1 Fencing, Mines Dept. Yard

List of Buildings and their Functions at Haralinga

<u>BL Group</u>	<u>Base Laboratories</u>
BL1	Headquarters
BL2.1	General office and workshop building
BL2.2	General office and workshop building
BL2.3	General office and workshop building
BL2.4	General office and laboratory building
BL3	Range Headquarters
BL4	Radio Chemical Laboratories
BL5	Nuclear Instrument Laboratories
BL6	Health Physics Building
BL7-8	Meteorological Office, Signals Office and Telephone Exchange
BL7.1	Balloon shed
BL7.2	Sonde Station
BL7.3	Met. Radar Set
BL7.4	Observers' Tower
BL7.5	Instrument compound
BL8.1	Radio Transmitter
BL8.2	Radio Receivers
BL8.3	Signals Store
BL8.4	Aerial Couplers Stand
BL8.5	V.H.F. Shelter (Transport)
BL8.6	V.H.F. aerial (Transport)
BL8.7	V.H.F. aerial (yellow)
BL8.8	V.H.F. Hut (Transport)
BL8.9	V.H.F. Hut (Yellow)
BL9	Photographic Laboratory
BL9.1	Cold Store (Photographic)
BL9.2	Photographic store
BL10	Toilet accommodation
BL11	Ventilation and Filter Plant
BL11.1	Supports for external ductwork
BL12	Ventilation and water cooling plant
BL12.1	supports for external ductwork
BL13	Radioactive effluent disposal

BL Group (continued)

BL14	Stabilized power generators
BL14.1	Fuel storage for stabilized power house
BL14.2	Technical services store
BL15	Materials and testing laboratory
BL15.1	Grading Plant shelter
BL15.2	Crushing Plant shelter
BL15.3	Graded Aggregate store
BL15.4	Cement store
BL15.5	Oil store
BL15.6	Curing Tanks
BL15.7	Sedimentation Tanks
BL15.8	Test rig
BL16	Static Water Storage
BL17	Helath Physics Store
BL18	Aerial Array for BL8.2
BL19	Aerial Array for BL8.1
BL20	E. and M. Office
BL21	Security Office
BL22	Radiation Laboratory (Thermal)
BL23	Access Road and hardstands
BL24	Shelters for filled Hydrogen bottle trailers
BL24.2	Storage huts
BL25	Hydrogen Cylinder Storage Buildings
BL26	Balloon and Equipment Store/Fabric Workshop/Generator Shop
BL27	} Hydrogen Production Plant
BL28	
BL29	Cylinder Maintenance and Testing
BL30	Gas Inspection and Test Building
BL31	Gas Holder
BL32	Fencing
BL33	Services for BL 23 - 32
BL34	
BL35	
BL36	

List of Buildings and their Functions at Maralinga

<u>XA Area</u>	<u>Explosive Area</u>
XA1.1	Workshop, assembly and storage
XA1.2	H.E. Storage
XA1.3	Assembly laboratory
XA2.1	H.E. Storage (T.M.)
XA2.2	H.E. Storage (T.H.)
XA3.1	Explosive Storage for Range Commandant
XA3.2	Explosive Storage for Scientists
XA3.3	Ammunition Storage
XA3.4	Ammunition Storage
XA3.5	Detonator Store
XA4.1	Storage of Radioactive Components
XA4.2	Storage of Radioactive Components
XA4.3	Storage of Radioactive Components
XA4.4	Storage of Radioactive Components
XA5	Assembly Laboratory, Radioactive Components
XA6	Security Office and tea room
XA7	Disposal of radioactive effluent from XA5
XA8.1	Toilet accommodation for XA6
XA8.2	Toilet accommodation for XA1.1
XA8.3	Toilet accommodation for XA2.2
XA8.4	Toilet accommodation for XA3.1 and XA3.3 and XA3.4
XA9	Store for radioactive sources
XA10.1	Security fence round XA1.1
XA10.2	Security fence round XA1.2
XA10.3	Security fence round XA2.1
XA10.4	Security fence round XA2.2
XA10.5	Security fence round XA3.2
XA10.6	Security fence round XA3.1, 3.3 and 3.4
XA10.7	Security fence round XA5 area
XA10.8	Security fence round XA1.3