

SCALE 19

GROUND SUPPORT EQUIPMENT ACCOMMODATION

1 This scale is to be read in conjunction with Scales 1, 45 and 47. It covers the provision of permanent facilities at station level for the maintenance, storage, control and administration of Ground Support Equipment (GSE) associated with the operation of aircraft or radar installations. For the purpose of this scale, GSE is that listed in AP 100P-0101 (Royal Navy) and AP 100E-10 (Royal Air Force). Climatic and local conditions at stations overseas may require variations from this scale.

2 Provision for mechanical transport (e.g. aircraft refuellers, fire fighting vehicles, specialist airfield equipments) is in Scale 27.

3 The scale is divided into 4 parts:

Part 1 - Maintenance Workshops

Part 2 - GSE Stores

Part 3 - Battery Charging Shops

Part 4 - Offices and Staff Accommodation

4 Benches and racking are to be provided as specified in the project brief. Racking and shelving are to be an adjustable and boltless system.

5 Drainage is to be such that no discharge pollutes ground waters, ditches, streams, or other waters. Where discharge is made to a sewer, the appropriate requirements of the Pollution Control Authority shall be met. Wastes from the facilities in this scale are potentially hazardous or polluting, and guidance on responsibility and negotiation of discharge consents shall be via the Environmental Group, Defence Estates.

6 All designs must comply with the Health and Safety at Work etc Act 1974 (which makes reference to Building Regulations and to the Factories Act 1961), the Workplace (Health Safety and Welfare) Regulations 1992, or with equivalent legislation overseas. All M & E installations and equipment must comply with IEE Regulations for the Electrical Equipment of Buildings, Technical Instructions and Standard Specifications as well as the relevant fire and safety regulations.

7 - 20 Spare.

PART 1 - MAINTENANCE WORKSHOPS

Accommodation	Area	M & E Services	Planning Notes, Special Fittings, etc.
(a)	(b)	(c)	(d)
21 Maintenance Workshop (comprising Serials 22 to 30)	<p>Area = 'X' x 0.7m² + 213m² where 'X' = the number of major GSE items on the station scale. NOTE</p> <p>1 Excludes lifting tackle.</p> <p>2 Includes armament GSE only if maintained by the station.</p> <p>3 Area provides manoeuvring space.</p>	<p>Gantry crane – Capacity 1.5 tonne.</p> <p>Hydraulic lift servicing platform - (when specified in the project brief). Unless stated otherwise the following applies to Serials 22-30.</p> <p>Illumination - 500 lux with supplementary lighting as required.</p> <p>Electric Power – Socket outlets as required. Power supplies for fixed equipment as required (outlets minimum height of 0.5m above floor level).</p> <p>Heating - 16.0°C.</p> <p>Compressed Air - minimum of one outlet at 7 bar gauge for each 100m²</p>	<p>Crane to traverse at least 50% of the workshop area. Platform with wheel stops; flush fit to the floor when not in use. Access doors of concertina type with a clear height of 4.3m and 4.0m opening. Additional personnel doors. Height of working area minimum 6.0m. Floor to be concrete bases, non-slip, easy clean and impervious to fuels, oils and solvents. Floor drainage - see Serial 5.</p> <p>Air compressor must be installed outside the maintenance area.</p>

PART 1 - MAINTENANCE WORKSHOPS (contd)

(a)	(b)	(c)	(d)
21 contd		Water Supply - Minimum one Cold water outlet for sluicing	Water supply to be provided with a hose fitting.
22 Component Cleaning Bay	12.0m ² minimum. Area included in Serial 21	Illumination - All fittings to be flame-proof. Electric Power - All fittings to be spark-proof. Heating - The system must not be of a type that circulates air between rooms. Compressed Air -for air supplied breathing apparatus as well as for cleaning tasks. Water Supply - as required for cleaning equipments. Ventilation and Fume Extraction - To comply with HSE EH 40 for at the very least the 8 hour TWA for the chemicals in use.	Bay to be fully enclosed to isolate it from other bays and working areas. Floor as for Serial 21. Walls to be tiled to 2.0m above floor level. External double doors, flush panelled, outward opening, self-closing, panic bars on fire escape doors. Internal doors swing type with vision panel, no catches. All external doors and windows to provide an effective seal when closed. Drainage - see Serial 5. Shower and eye wash facilities for decontamination.

PART 1 - MAINTENANCE WORKSHOPS (contd)

(a)	(b)	(c)	(d)
23 Electrical Component Maintenance Bay	20.0m ² + 5.0m ² for each 100 items GSE categorised Major (excluding lifting tackle and armament) Area included in Serial 21	Illumination - 700 lux Electric Power - Plus 415V 50Hz 60A switched and fused wall box (to include RCD protection). Electrical Supply to comply with MOD DEF STAN 61-15.	Bay to be enclosed area with inward and outward opening double doors with 2.0m opening. Personnel access door to be provided.
24 Hydraulic Trolley Maintenance Bay	Part of Serial 21		To be served by overhead gantry crane. Portable screening to be provided, minimum height of 2.0m. Floor as Serial 21.
25 LOX Trolley Maintenance Bay	24.0m ² minimum. Area included in Serial 21		Fully enclosed; clear door height of 2.5m. Personnel access door. Entrance to be clearly marked "LOX Trolley Maintenance Only".
26 Domestic Electric Bay	20.0m ²	Illumination - 750 lux	May be added to Serial 23

PART 1 - MAINTENANCE WORKSHOPS (contd)

(a)	(b)	(c)	(d)
27 GSE Run-up Bay (when specified in project brief)	42.0m ² .	Illumination - 750 lux Exhaust Extraction - to be done at source through flexible pipes and coupling.	Doors to be concertina type, with an opening of 3.0m. Noise reduction measures to be specified.
28 Lifting Tackle Area	25.0m ² .	Ventilation and fume extraction - As required.	Separate overhead lifting facilities are to be provided if area cannot be served by main o/head gantry crane.
29 GSE Parking Storage Area	Calculate as Serial 21	Illumination - 30 lux	Minimum Height 4.3m Floor, equipment and personnel doors as Serial 21.
30 GSE Uncovered Washdown Hardstanding (when specified in project brief)	63.0m ² for major GSE items only.	Illumination - 100 lux Electric Power - Supply for the washing equipment; to be waterproof to at least IP 45. Water Supply - for washing equipment as required.	One high pressure, mobile, plug-in type washing equipment. Water outlet to have hose fitting. Drainage - see Serial 5.

PART 2 - GSE STORES

(a)	(b)	(c)	(d)
31 GSE Component Store	20.0m ² + 8.0m ² per 100 major GSE items (excluding lifting tackles and armament)	Illumination - 125 lux 250 lux at issue point Electric Power - One 13A double socket outlet to every 37m ² of floor space. Heating - Manned 16.0°C Unmanned 13.0°C.	Issue counter Racking see Serial 4.
32 Domestic Electrical Component Store	12.0m ²		As Serial 31.
33 Flammable Store	6.0m ² minimum.	Illumination - 100 lux Electric Power - As required. All equipment to comply with Division 1 Area of British Standard Code of Practice 1003. Flame-proof design.	Floor as Serial 21. Constructional standards to comply with JSP 317. Access only from outside through steel or fireproof door, no windows. Racking see Serial 4.

PART 3 - BATTERY CHARGING SHOPS

(a)	(b)	(c)	(d)
34 Entrance/Lead Acid Battery Issue Point	Included in Serial 35	Illumination - 175 lux Water Supply – Cold. Ventilation and Heating - to be in accordance with M&E Engineering Guide.	General Guidance is given in AP 120C-0001-1. Acid resistant sink. Screening to contain splashing from sink. Issue counter, maximum height 0.5m.
35 Lead Acid Battery Charging Room	1.6m ² per charging point.	Illumination - 125 lux Luminaires to conform to at least IP 54. Electric Power - Power supplies for battery charging equipment as required. Electrical equipment installed within the space is to be corrosion resistant. Water Supply - Hot and cold. Ventilation and heating - As for Serial 34.	Cold water tap with hose fittings. Floor to be non slip, easy clean, and impervious to acid and alkali spillage. Sill barrier to be provided at door to retain spillage. Ceramic hand basin. Rectifiers Not Works supply.
36 Entrance/Alkaline Battery Issue Point	Included in Serial 37	Illumination, Ventilation and Heating - As for Serial 34.	Issue counter as Serial 34
37 Alkaline Battery Charging Room	2.0m ² per charging point	As Serial 35.	As Serial 35

PART 3 - BATTERY CHARGING SHOPS (contd)

(a)	(b)	(c)	(d)
38 Cupboard, Protective Clothing	0.5m ² per person employed	As Serial 34.	Separate cupboards (Not Works supply) for the storage of protective clothing for Acid and Alkaline Charging Rooms. To be located at the access points of the two Charging Rooms.
39 Trolley Accs Servicing Point	12.0m ² per charging point	As Serial 34.	To be sited adjacent to the battery charging rooms. Cold water tap with hose fitting. Floor to be impervious to acid and to incorporate drainage.
40 Storage Compound	To be specified at project brief stage.	Illumination and Water Supply - As Serial 34.	For storage and disposal of waste electrolyte and scrapped batteries.

PART 4 - OFFICES AND STAFF ACCOMMODATION

(a)	(b)	(c)	(d)
41 Offices (OIC, Documentation, Trade Manager, Battery Charging)			Refer to Scale 45
42 Crew Rest Room			Refer to Scale 47
43 Toilet Area			Refer to Scale 1 Annex B.
44 Cleaners Room			Refer to Scale 1 Annex B.
