SCALE 54 TECHNICAL STORES

INTRODUCTORY NOTES (GENERAL)

- 1 This scale is to be read in conjunction with Scales 1, 9, 17, 27, 40, 45, and 47. It applies to the area of technical storage accommodation to be provided at units and is divided into 3 parts:
- Part 1 Army Units, Royal Marines Establishments and Royal Air Force Regiment Units.
- Part 2 Royal Navy and Royal Air force Stations.
- Part 3 Ancillary Facilities.

It is also complementary to Scale 53, Non-Technical Stores, and storage areas quoted in both scales may, where required, be aggregated to allow provision of a single stores complex on an open plan basis with demountable partitions dividing storage groups.

2 Technical storage accommodation should generally be sited within the main engineering area with adequate vehicular access from the main entrance to the station. Adequate space is to be provided for parking and turning large vehicles up to 18m in length. The site and buildings should allow for extension of a complex if required. In order to facilitate the delivery and dispatch of stores a covered vehicle

loading/unloading dock is to be provided with ramps or lift table to the interior if necessary. The ramps should have nonslip surfaces and be built to a suitable gradient, not less than 1:12, preferably 1:15, to facilitate use of mechanical handling equipment (MHE).

- 3 The areas in this scale are based on a stores stacking height of 3.0m for steel shelving and binning. Where higher storage is recommended i.e. up to 3.6m for steel shelving or binning and 4.8m for bulk storage, a clear stacking height of 6.0m to facilitate the use of MHE should be specified. Raised storage platforms may be specified as required.
- 4 The design of the building should normally exclude the use of roof support pillars. Aisle widths should be the minimum consistent with the safe operation of mechanical handling aids and fire safety requirements. Where mechanical handling aids are not to be used aisle widths will normally be a minimum of 1.0m.
- 5 The heating installation in store houses will be in accordance with Scale 1 Serial 31, but where central heating is not practicable owing to site limitations, the most economical alternative method of heating will be employed. Heating installations should not intrude into the storage areas.

INTRODUCTORY NOTES (GENERAL) (contd)

- Interior doorways must be adequate to facilitate the use of MHE. External doors for vehicles should be not less that 3.6m x 4.2m high and be provided with personnel doors and individual locks. Power operated doors must be justified. External doors used solely by specialist vehicles may be smaller but not normally less that 3.0m high, (See also Part 1 Serial 10 and Part 2 Serial 10 on the need for weather protection). Weather protection should be provided to all access doors for vehicle loading. Interior doorways are to be large enough to permit the use of MHE. All doors are to have kick plates.
- 7 Floors to be trowel smoothed with a hardened dust free surface and designed to meet the loading requirements. Guidance on the standards of floor flatness to be applied in high rise storage areas is given in MOD publication JSP 336 Pamphlet 11. Special environmental requirements for dust free air or humidity control are not contained in this scale and requirement s should be specified at project brief stage.
- 8 Natural lighting in storage areas must be provided at high level. Lighting systems should be flexible/adjustable to accommodate minor changes to the racking layout without rewiring and not to intrude into storage areas. Attention

should be paid to the lighting requirements of larger storage buildings where particular problems may be encountered, especially in areas where repairs may be carried out.

- 9 In buildings which contain valuable and attractive items, additional security measures such as provision of an inner expanded metal cage may be specified.
- 10 Offices, rest rooms, toilets, battery charging areas and other ancillary areas are to be segregated from the main store by fire walls.
- This scale does not cover the provision of armouries, ammunition or explosives stores, bulk fuel installations, dangerous stores/compounds, or storage for compressed and industrial gasses, all of which need justification at project brief stage and special safety/security precautions. Armouries, together with details of doors, racks, and counter fitments etc. are to be built in accordance with DOE/PSA type drawing number 55713/2. The construction of unit ammunition stores is similarly governed by DOE/PSA type drawing number 55716/2. These drawings are under review at present, and advice should be sought from DE as to the latest position.

12-20 Spare

PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS

- 1 This part of the scale is to be applied where there is a need to provide accommodation for the storage of Technical Stores. It is divided into 5 Sections as follows:
 - 1 Royal armoured Corps Regiments
 - 2 Royal Artillery Regiments
 - 3 Royal Engineer Regiments
 - 4 Royal Signals Regiments
 - 5 Infantry Battalions, including Royal Marines Establishments and Royal Air Force Regiment units.
- The amount and types of Technical Stores held by units vary considerably according to the type of unit and its role; for this reason is it not possible to cater for the detailed storage requirements of all types of Army units in the scale.

 NOTE: It excludes storage and drying facilities for tentage (and associated camouflage nets) which are to be assessed at project brief stage.
- 3 This scale shows the normal requirements for Technical Stores for RAC, RA, RE and Royal Signals regiment, for Infantry Battalions, and where appropriate, RM and RAF Regiment units. Any major variance in requirement from the areas authorised in this scale will require justification at project brief stage. This scale is to be read in conjunction with the Introductory Notes (General).

- 4 This scale is also to be used as a guide to the technical storage requirement s of all other types of Army unit. Such requirements are to be assessed by the sensible application of the areas authorised in this scale, and justified at project brief stage.
- The areas authorised for the Regiment URS store and sub-unit stores in this scale e.g. Sqn/Bty/Coy URS Stores, Support Platoon Stores, etc. are intended to cover normal requirements for individual stores but it is important that consideration be given to the advantages of flexibility which can result when Unit Technical Stores are provided under one roof. These Stores may therefore be provided as individual stores or as a single area which could be partitioned (expanded metal caging0 as required to suit individual unit's needs. It should be noted that he technical stores requirements for tanks and gun equipments are to be provided within the MT Area and that MT URS stores requirements are scaled in Scale 27 Mechanical Transport Accommodation.
- 6 In order to facilitate the delivery, issue and receipt of stores, the Unit Technical Stores buildings are to be single storey buildings with covered vehicle loading/unloading docks with ramps to individual stores if necessary, and with adequate vehicle access facilities. See Serial 2 of Introductory Notes (General).

PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS (contd)

- The planning and siting of Unit Armouries and Unit Ammunition Storehouses for Army units is to be executed in conjunction with the specialist advice of the appropriate security Adviser for both facilities, and HQ DLSA (initially through CATO No 1 Ammunition and Disposal Unit) for ammunition storehouses. The type drawings referred to in Serial 8 of Introductory Notes (general) are held at Command/District HQ.
- 8 The overall ceiling height should be 4.0m, that is to allow a stacking height of 3.0m with 1.0m clearance above, except where MHE is to be used. See Serial 3 of Introductory Notes (General).
- 9 Pallet and metal racking and shelving is to be of an adjustable and boltless system as required. Associated storage trays as required.

10 -20 Spare.

4

PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS (contd) SECTION 1 ROYAL ARMOURED CORPS REGIMENTS

| Accommodation | Area | M & E Services | Planning Notes, Special Fittings, etc. |
|--|---|---|--|
| (a) | (b) | (c) | (d) |
| REGIMENT STORES 21 Equipment Table Stores to consist of: a Issue and Receipts Area b E T Stores c Expense Store d Misc. and Unserviceables Store e Packing case Store f Driclad Store |)) 195.0m ²)) 25.0m ² (based on 8 tanks) To be provided only where justified | The following M & E detail is applicable to all serials except where stated (see Serial 9) Illumination - 125 lux (large items of eqpt); 175 lux (small items of eqpt); 225 lux for supplementary local lighting e.g. issues and receipts areas and benches. Electric Power - One 13A double socket outlet to every 50m² of floor space. Minimum one per store room. Heating - Working and packing spaces 16.0°C. Storage spaces 13.0°C. | This store does not include requirements for LADs which are separately catered for. See Scale 27. Counters (with built-in shelving) in individual stores as required. Racking and shelving as required. Adjustable pallet racking may also be provided if justified at project brief stage (See Serial 9). High level windows with guard bars. Secure heated cupboards for storage of sensitive eqpt, size (1800mm x 600mm) per 4 tanks. |
| g Incinerator and Compound | Minimum area - Requirement to be justified at project brief stage (Does not attract area addition) | Ventilation - is to be provided for special tasks/functions client's particular requirements. | Fully enclosed incinerator with chimney to burn returnable packing and waste material, to comply with pollution regulations. |

5

SCALE 54

| (a) | (b) | (c) | (d) |
|----------------------------|--|---|---|
| 22 Flammable Liquids Store | 37.0m ² | Illumination - 100 lux. all electrical eqpt to be suitable for a Division 1 Area of British Standard Code of Practice 1003. Heating - 13.0°C | May be part of or built onto main building. constructional standards are in JSP 317 Paragraph 0628. Anti-flood barrier to be provided at door sill to restrict spilt paint. Racking and shelving as required. (see Serial 9). |
| 23 MT URS Stores | | | Refer to Scale 27. Note: If MT URS Stores are to be held in binned vehicles within the Technical Stores complex planning should take account of ceiling height and entrance requirements for vehicle(s). |
| 24 Scrap Compound | Minimum area - Requirement to be justified (Does not attract area addition). | Illumination - 20 lux | Hardstanding within XPM or similar perimeter fence with gate for vehicle access. |
| 25 Tracks Compound | Minimum area - Requirement to be justified. | Illumination - 20 lux | Hardstanding within XPM or similar perimeter fence with gate for vehicle access |

| (a) | (b) | (c) | (d) |
|--|--|---|--|
| SQUADRON STORES 26 Sabre Squadrons (for each Sqn) a General Equipment Table Stores b Signals Store | 56.0m ² (Includes space for office for SQMS) 9.3m ² | As for Serial 21. (Note need for continuous running de-humidifying equipment to prevent damage to sensitive equipment). | Counters (with built-in shelving) in individual stores as required. Adjustable and boltless system of metal racking and shelving as required. Adjustable pallet racking may also be provided if justified at project brief stage (see Serial 9). High level windows with guard bars. |
| 27 Admin Squadron a General Equipment Table Store b Signals Store | 56.0m ² (Includes space for office for SQMS) 20.0m ² | | See Serial 26 |
| 28 Radiac Store | 7.4m ² | Illumination - 100 lux Heating - NIL Ventilation -Well ventilated by natural means. | Single storey non-flammable construction. Not subject to flooding. Access restricted and signed in accordance with Army Code 70273 (Pam 8) or MOD (Air) 3395 (Pam 8). |

SCALE 54 7

PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS (contd) SECTION 2 ROYAL ARTILLERY REGIMENTS

| SECTION 2 ROTAL ARTILLER | I REGINIENTS | | |
|---|---|---------------------------------------|--|
| (a) | (b) | (c) | (d) |
| REGIMENT STORES 29 Equipment Table etc Stores to consist of: a Issues and Receipts Area b E T Store c Expense Store d Tyre Store e Misc. stores (Including Unserviceable Stores) f Packing Case Store |)))) 250.0m ²)) | As for Serial 21 | This store does not include requirements for LADs which are separately catered for. Refer to Scale 27. Counters (with built-in shelving) in individual stores as required. Racking and shelving is required. Adjustable pallet racking may also be provided if justified at project brief stage. (See Serial 8) High level windows with guard bars Refer to Scale 27. NOTE If MT URS Stores are to be held |
| g Unit Replenishment Scales (URS) | Area requirement to be justified at project brief stage | | in vehicles within the Technical Stores complex, planning should take account of ceiling height and entrance requirements for vehicles. |
| h Hazardous Materials Area | 8.0m ² | In compliance with H&S Regulations | To be agreed at project brief stage. Signage in accordance with current H&S Regulations |

| OLOTION E NOTAL ANTICLEN | - 112 - 111 - 10 - 111 - | | |
|--|--|------------------|--|
| (a) | (b) | (c) | (d) |
| 29i Incinerator and Compound | Minimum area - Requirement to be justified at project brief stage (Does not attract area addition) | | As for Serial 21 |
| 30 Battery Stores(for each battery) To consist of: a General Equipment Table Store b Signals Store c Survey Instruments Store d Map Preparation Space e MT URS Store f Air Portability Store (if required) | 56.0m ² 60.0m ² 19.0m ² 15.0m ² 19.0m ² 10.0m ² | As for Serial 21 | Above reference to counters, shelving, racking and windows applies. Work bench for Signals Store. Heated cupboard in Survey Instruments Store. |
| 31a Gun Troop Stores (for each Gun Troop) b Troop Stores for other Armoured Vehicles | 9.0m ² per gun 8.0m ² per vehicle | As for Serial 21 | To be provided within the unit MT accommodation. Each troop to have an electrically heated cupboard for gun sights etc. |
| 32 Flammable Liquids Store | 8.0m ² | | As for Serial 22 |

| | 201101121101112111111111111111111111111 | | | | |
|--------------------|--|------------------|--|--|--|
| (a) | (b) | (c) | (d) | | |
| 33 Scrap Compound | Minimum area - Requirement to be justified at project brief stage (Does not attract Area Addition) | | As for Serial 24 | | |
| 35 Tracks Compound | Minimum area - Requirement to be justified at project brief stage (Does not attract A/A) | | As for Serial 25 | | |
| 36 Radiac Store | 7.4m ² | As for Serial 28 | Single storey non-flammable construction. Not subject to flooding. Access restricted and signed in accordance with Army Code 70273 (Pam 8) or MOD (Air) 339 (Pam 8). | | |

PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS (contd) SECTION 3 ROYAL ENGINEER REGIMENTS

| (a) | (b) | (c) | (d) |
|--|---|------------------|---|
| 36 HQ Squadron Stores to consist of: a Command Troop Store b Admin Troop Store c Stores/Workshop Troop Stores: I Equipment Table Store ii Expense Store iii Metal and Timber Store d Plant Troop Store i Equipment Table Store ii CES Store e MT Troop Store f Engine Store f Engine Store h Signals Store i Issues and Receipts Area ii Radio Store iiii Signals Line Store | 33.0m ² 33.0m ² 60.0m ² 28.0m ² 93.0m ²))60.0m ²) 19.0m ² 33.0m ² 19.0m ² | As for Serial 21 | Counters (with built-in shelving) in individual stores as required. Racking and shelving as required. Adjustable pallet racking may also be provided if justified at project brief stage. Cantilever racking if required (see Serial 8). High level windows with guard bars Work bench for Radio Store. |

| | (0011101) | | |
|---|---|-----------------------------------|---|
| (a) | (b) | (c) | (d) |
| 36 (contd) iv Battery Charging Room | 23.2m ² Requirement to be justified. Units with alkaline batteries need a separate rectifier room the area of which is to be justified at project brief stage. | | Includes MT requirements. See Scale 27 and DMG 13 - MT Facilities. |
| j Sqn Flammable Liquids Store k Incinerator and Compound | 8.0m ² Minimum area - Requirement to be justified at project brief stage (Does not attract A/A) | As for Serial 22 As for Serial 21 | As for Serial 22 As for Serial 21 |
| 37 Field Squadron Stores (for each Field Squadron) a Squadron HQ and Store i Issue and Receipts Area ii Equipment Area b Squadron Signal Equipment Store i Issues and Receipts Area ii Equipment Store ii Equipment Store |)) 56.0m ²))56.0m ² | | Counter (with built-in shelving) in individual stores as required. Racking and shelving as required. Adjustable pallet racking may also be provided if justified at project brief stage (see Serial 8) Work bench in repair area. |

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| (a) | (b) | (c) | (d) |
|---|--|-----------------------|--|
| 37 (contd) c MT Equipment Store d Plant Troop Store e Field Troop Stores) for | 14.0m ² 23.0m ² 33.0m ² | | High level windows with guard bars. |
| each Troop) f Field Sqn Flammable Liquids Store | 8.0m ² | As for Serial 21 | As for Serial 22 |
| 38 Scrap Compound | Minimum area - Requirement to be justified at project brief stage (Does not attract A/A) | | As for Serial 24 |
| 39 Miscellaneous Role Stores Compound | Minimum area - Requirement to be justified at project brief stage (Does not attract A/A) | Illumination - 20 lux | XPM or similar perimeter fence with gate for vehicle access. |
| 40 Tracks Compound | Minimum area - Requirement to be justified at project brief stage (Does not attract A/A) | | As for Serial 25 |
| 41 Radiac Store | 7.4m ² | | As for Serial 29 |

PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS (contd) SECTION 4 ROYAL SIGNALS REGIMENTS

| (a) | (b) | (c) | (d) |
|--|--|------------------|---|
| REGIMENT STORES 42 Regiment Equipment Tables etc. Stores to consist of: a Receipts and Issues Area b Equipment Table Store c Expense Store d Conditioning U/S Store e MT and Tyre/Track Store |)) 286.0m ²) | As for Serial 21 | This store does not include requirements for LADs which are separately catered for. See Scale 27. Counters(with built-in shelving) in individual stores as required. Racking and shelving as required. Adjustable pallet racking ma also be provided if justified at project brief stage (see Serial 9). Tyre storage racking, type to be specified. High level windows with guard bars. |
| f Incinerator and Compound | Minimum area - Requirement to be justified at project brief stage (Does not attract A/A) | | As for Serial 21. |

| (a) | (b) | (c) | (d) |
|---|---|---|---|
| 43 FATSO/Tech Workshop/ Store(M) to consist of: a Receipts and Issues Area b FATSO c Tech Eqpt Repair Area d DC Machine Cleaning etc Area e Machine Drilling etc Area f Telecomms Eqpt/Sealing & Drying Area g Special to Content Containers |))))))))) 233.0m ²))) | As for Serial 21 Stabilised Power Supply - 6 outlets per working position. Electrical Installations within workshops to comply with Def Std 61- 15 Earthing points for external vehicle testing | Above reference to counters, shelving, racking and windows applies. Dust free floor covering where justified. (a) External double doors (with individual lock) to R & I Area. Work benches minimum 0.9m width with instrument shelf 400mm above bench (as required) hard wearing non-flammable. (b) Spirit bath for cleaning teleprinters. (c) Water bath for leak testing. |

| (a) | (b) | (c) | (d) |
|---|---|---|---|
| 44 Crypto Workshop/Store To consist of: a Area/Room 1 (Workshop) b Area/Room 2 (Eqpt Store) |))74.0m ²) | Illumination - Room 1 175 lux Heating - Room 1 - 16°C M & E detail - Room 2 as for Serial 21 Electric Power - as required | Construction is to meet the standards laid down in 'Military Cryptographic Instructions'. |
| 45 Flammable Liquids Store | 10.0m ² | | As for Serial 22 |
| 46 Air Portable Store(Unit Emplanement Officer) | Minimum area 19.0m ² | As for Serial 21 | The total area for this Store to be justified at project brief stage. |
| 47 HQ Squadron Stores to consist of: a G1098 etc Store b Staff Branch Stores c Troop Stores | 47.0m ² 10.0m ² (for each Staff Branch Formation) 28.0m ² (for each troop) | As for Serial 21 | Counter with built-in shelving in individual stores as required. Racking and shelving as required. Adjustable pallet racking may also be provided if justified at project brief stage (see Serial 9). Staff branch stores normally to be provided as one store. |

| (a) | (b) | (c) | (d) |
|--|--|---|---|
| 47 (contd) d Battery Charging Room (for acid & alkaline batteries) | This area is deemed to cover the following requirements which should be provided in separate rooms as follows: (a) rectifier room for acid batteries (b) rectifier room for alkaline batteries The area of each room is to be agreed at project brief stage | Illumination - 125 lux Electric Power - Power supplies for battery charging equipment as required. Electrical equipment installed within the space is to be corrosion resistant. Luminaires to conform to at least IP54. Ventilation and heating are to comply with the DOE/PSA M & E Engineering Guide. Water Supply – Cold. | Includes MT requirements. Refer to Scale 27 and DMG 13. |
| 48 Signal Squadron Stores (for each Signal Squadron) to consist of: a Sqn HQ G1098 Store b Signal Troop G1098 Store (for each troop) | 74.0m ² 56.0m ² | As for Serial 21 | Counters (with built-in shelving) in individual stores as required. Racking and shelving as required. Adjustable pallet racking may also be provided if justified at project brief stage (See Serial 9) |

| (a) | (b) | (c) | (d) |
|---------------------------------------|--|--|---|
| 48 (contd) c Tech Workshops/Stores | 28.0m ² | Electrical installation within workshop to comply with Def Std 61-15 | |
| 49 Hardstanding (For 4 vehicles) | Area to be justified at project brief stage | Illumination - 20 lux | For exterior vehicle equipment testing. To be located with Serial 48. |
| 50 Radio Mast Ladder Store | Minimum area - Requirement to be justified at project brief stage (Does not attract area addition) | Illumination - 20 lux | Open sided structure |
| 51 Scrap Compound | Minimum area - Requirement to be justified at project brief stage(Does not attract A/A) | | As for Serial 24 |
| 52 Radiac Store | 7.4m ² | | As for Serial 29 |

PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS (contd) SECTION 5 INFANTRY BNS INCLUDING RM ESTABLISHMENTS AND RAF REGIMENT UNITS

| (a) | (b) | (c) | (d) |
|--|--------------------------------|------------------|--|
| 53 Regimental Equipment Table Store Normally to be divided into 4 areas a Receipts Area b Issues Area c Unserviceable Stores d Equipment Table Expense Store |))167.0m ²) | As for Serial 21 | Counters (with built - in shelving) in individual stores as required. Racking and shelving as required (see Serial 9). Work benches as required. Secure lockable cages within Receipts and Unserviceable stores areas for V and A items. High level windows with guard bars. |
| 54 Bn General Store | 60.0m ² | As for Serial 21 | For compo packs, tentage, internal security and long term loan issues. Other facilities as required as detailed in Serial 53, column (d). |

PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS (contd) SECTION 5 INFANTRY BNS INCLUDING RM ESTABLISHMENTS AND RAF REGIMENT UNITS (contd)

| (a) | (b) | (c) | (d) |
|---|-------------------------------------|--|---|
| 55 Bn Signals Equipment Store Normally to be divided into 4 areas a Radio Store b Tels Workshop c Line Store d Rear Link Detachment Store |)))100.0m ²) | As for Serial 21 Tels Workshop: Workbench with 4 13A double socket outlets. Electrical installation within workshop to comply with Def Std 61-15 | Tels Workshop (15.0m²) containing: Work bench with electrical equipment as detailed in column (c); Wire and cable rack; Security cabinet (Not Works supply); Racking and shelving as required (see Serial 9). |
| 56 MT Store (Equipment Table Stores) | 19.0m ² | As for Serial 21 | Normally in MT compound. Storage requirements for Unit Workshops and LADs are separately catered for by Scale 27. Vehicle items, including camouflage nets are to be stored in the MT Compound as authorised by Scale 27. Racking and shelving as required (see Serial 9) |
| 57 MT URS Store | | | Refer to Scale 27 |

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PART I - ARMY UNITS, ROYAL MARINES ESTABLISHMENTS AND ROYAL AIR FORCE REGIMENT UNITS (contd) SECTION 5 INFANTRY BNS INCLUDING RM ESTABLISHMENTS AND RAF REGIMENT UNITS (contd)

| (a) | (b) | (c) | (d) |
|--|---|------------------------|---|
| 58 Store (empty cartridge cases and ammunition containers) | 16.0m ² | Illumination – 100 lux | Workbench for sorting to include trough and means of filling into containers. |
| 59 Bn Flammable Liquids Store | 9.0m ² | | As for Serial 21 |
| 60 Packing Case (Knock Down Items) Store | 23.0m ² | As for Serial 21 | |
| 61 Company URS Store (for each Company) | Company 74.0n HQ Company 80.0r HY Weapons Coy 80.0r | n ² | As for Serial 53 |
| 64 Mortar Platoon Store | 42.0m ² | As for Serial 21 | As for Serial 53 |
| 65 Anti-Tank Platoon | 48.0m ² | As for Serial 21 | As for Serial 53 |
| 66 Assault Pioneers Store | 23.0m ² | As for Serial 21 | As for Serial 53 |
| 67 Reconnaissance Platoon Store | 23.0m ² | As for Serial 21 | As for Serial 53 |
| 68 Scrap Compound | | | As for Serial 24 |
| 69 Compound for Tracks and/or Defence Stores | | | As for Serial 25 |

SCALE 54 21 Edition 3/July 1999 Amendment No 5/December 2001

- 1 This part of the scale relates primarily to RN and RAF flying stations but it may also be used as a guide for other RN and RAF stations where there is a need to provide for the holding and issue of technical stores.
- 2 These notes are to be read in conjunction with the Introductory Notes (General).
- 3 The technical storage requirements vary considerably between units and the scale is based on the number of separate reference numbered items of technical stores (excluding electronic storage groups).
- 4 The areas detailed within the scale from Serial 21 onwards apply to stations with a technical store holding of 5000 to 40000 separate reference numbered items. The holdings to be stated in terms rounded up to the next thousand. Requirements for stations holding less than 5000 or more than 40000 separate reference numbered items will be determined in consultation with MOD and Headquarters Supplies staffs at project brief stage.
- 5 The storage planning is to be based on the broad handling/storage characteristics of the equipment to be stored, which may be conveniently divided into 3 groups as follows:

- a BINNABLE EQUIPMENT:- Items which are small enough to be stored in small parts storage bins, which will themselves be placed upon shelves or louvred panels. Bins may be of plastic, steel, or fibreboard dependent on the application and type of equipment to be stored, which will be specified.
- b. SHELVABLE EQUIPMENT: Items which can be stored on open or closed shelves and be variable in weight from about 13 kg (handleable) to 100 kg (bulk) which will require the use of mechanical equipment. Shelving may be of the adjustable, boltless type, dependent on the application and usage. Normally such stored items will be packaged. The type of shelving is to be specified at project brief stage.
- c. BULK EQUIPMENT: Generally bulk equipment will be stored in unit loads, bulk packs or in palletised loads which require the use of mechanical handling equipment for its movement and storage. May be stored in tiers, block stacks or pallets, or on pallet racking. Loose or unpackaged equipment will be stored on heavy duty shelving or shelved pallet racking.

- 6 When planning storage layouts, care must be taken to ensure that aisle widths are adequate for the MHE to be used, without being excessive and thereby wasting storage space.
- 7 This scale does not cover areas associated with specialist requirements and workshop bays, nor equipment for which special storage conditions are required. Such requirements are to be stated at project brief stage in consultation with the appropriate specialist branch.
- 8 RAF proposals for new build projects and major alterations to existing stores buildings or approach road layouts are to be referred to HQ RAFLC (DS1) in the first instance for specialist storage and materials handling examination.

9 Pallet and metal racking and shelving is to be of an adjustable and boltless system as required. Storage trays and bins, as required. This scale does not cover the provisions of armouries, ammunition or explosives stores, bulk fuel installations, dangerous stores/compounds, or storage for compressed and industrial gases, all of which need justification at project brief stage and special safety/security precautions.

10 - 20 Spare

| (a) | (b) | (c) | (d) |
|------------------------------------|---|--|---|
| 21 Handleable, Binnable Stores | 17.0m ² per 1000 separate reference numbers for binnable items | The following M & E detail is applicable to all serials except where stated (see Serial 9) Illumination - 125 lux (large items of eqpt); 175 lux (small items of eqpt); 225 lux for supplementary local lighting e.g. issues and receipts area and benches. Electric Power - One 13A double socket outlet to every 50m² of floor space. Minimum one per store room. Heating - Working and packing spaces 16.0°C Storage spaces 13.0°C Ventilation - is to be provided for special tasks/functions to client's particular requirements. | The area under column (b) includes for the racking, shelving and aisle widths (normally a minimum of 1.0m) but see Introductory Notes (General) Serials 3 & 4 and Part 2, Serials 4 and 6. Racking and shelving as required (see Serial 9). Binning to be provided as an integral part of the storage system. |
| 22 Handleable, Shelvable Stores | To be justified at project brief stage | As for Serial 21 | As for Serial 21 |

| (a) | (b) | (c) | (d) |
|--|---|------------------|---|
| 23 Non-handleable, Bulk Stores | To be justified at project brief stage | As for Serial 21 | Adjustable and boltless system of pallet racking which may be shelved, if required, as specified (see Serials 5 and 9). Use stacking height 4.9m for bulk stores. The area required will normally depend on range of equipment to be stored and on the task of the station. |
| 24 Tool Store | 5000 separate reference number items - 8.0m ² Add 0.5m ² per additional 1000 | | Racking and shelving as required (see Serial 9). Secure lock-up within main storage area. |
| 25 Valuable and Attractive Items Store | 5000 separate reference number items - 8.0m ² Add 0.1m ² per additional 1000 | As for Serial 21 | A secure lock-up. Location to be specified at project brief stage. |
| 26 Modification Store | 5000 separate reference number items - 15.0m ² Add 0.8m ² per additional 1000 | As for Serial 21 | Includes working and control area. Racking and shelving as required (see Serial 9). |

| (a) | (b) | (c) | (d) |
|-----------------------------|---|------------------|---|
| 27 Receipt and Despatch Bay | 5000 separate reference number items - 80.0m² Add 4.6m² per additional 1000 | As for Serial 21 | A covered vehicle loading area is to be provided which should be separate from the storage area. A raised loading dock 1.3m high may be provided. This should normally incorporate a dock leveller and/or lift platform and each facility would need to be justified. It is generally preferable to specify a modular steel docking system which is more cost effective in use and can be redeployed if needed. The size and capacity of each facility should be specified at project brief stage. Adequate weather protection is to be provided at the loading point with due allowance for energy conservation. Shelving for packing materials as required. |

| (a) | (b) | (c) | (d) |
|----------------------------------|--|---|--|
| 27 (contd) | | | An enclosed office area (within the area calculated in column (b)) may also be provided. Adequate vehicle manoeuvring area for vehicles up to 18m in length is to be provided where required |
| 28 Rubber Store | Varies with type of aircraft. Requirement to be justified | As for Serial 21, but heating as required | Tyre storage racking as required, type to be specified. Protection from direct sunlight. |
| 29 Classified Equipment Store | 5000 separate reference number items - 10.0m ² Add 0.6m ² per additional 1000 | As for Serial 21 | Store to be justified. Racking and shelving as required (see Serial 13). |
| 30 Mobility/Ready use Store | Requirement and size to be stated at project brief stage | As for Serial 21 | As for Serial 28 |
| 31 Refuse Area | 5000 separate reference number items - 10.0m ² Add 0.6m ² per additional 1000 (Does not attract area addition) | Illumination - 20 lux | Enclosed by retaining wall 1m high located near receipt and despatch section. To be protected from the weather as required. |

| (a) | (b) | (c) | (d) |
|---|---|--|---|
| 32 Scrap Compound | Minimum area - Requirement to be justified (does not attract A/A) | Illumination -20 lux | Hardstanding and secure perimeter fence and vehicular gate to access road. Partitioned into bays as required and sited to meet local requirements. Lock-up for valuable and attractive scrap. |
| 33 Battery charging area (Forklift Truck) | 14.0m ² minimum | Illumination - 100 lux Electric Power - Power supplies for battery charging equipment as required. | Charging points to be spaced at 1.8m and fixed at 1.5m above floor level on an external wall. |
| 34 Sqn/Flight lock-up | Area to be justified | As for Serial 21 | The area will depend on the role and location of the unit. Racking and shelving as required (see Serial 9) |
| 35 Returns/Repairables Store | 5000 separate reference number items - 20.0m ² Add 1.1m ² per additional 1000 | | Racking and shelving as required (see Serial 9). |

| (a) | (b) | (c) | (d) |
|----------------------------|---|-------------------------------|--------------------------|
| 36 Immersion Suit Store to | | Illumination - 175 lux | |
| contain: | | Heating - 13.0°C | |
| a Hanging Space | 0.1m ² per suit | Ventilation - Natural or | Fixed hanging rails with |
| | · | mechanical extraction in the | captive hooks. |
| b French-Chalking Table | 10.0m ² for table and 1 bath; | vicinity of each bath. | Floor drainage required. |
| c Decontamination | plus 3.0 ² for each additional | Water Supply - Hot and | |
| facilities (1 bath per 100 | bath | cold. | Table 1500mm x 900mm DAS |
| suits) | | Illumination - 350 lux. Local | supply. |
| d Repair Workshop. | Requirement to be justified at | lighting as required. | |
| ' | project brief stage | Electric Power - Supply for | |
| | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | repair equipment. | |
| | | Heating - 16.0°C. | |

29

PART 3 - ANCILLARY FACILITIES

| (a) | (b) | (c) | (d) |
|----------------------------|-----|-----|---|
| 1 Offices | | | Refer to Scale 45 |
| 2 Staff Toilets | | | Refer to Scale 1 Annex B. The entitlement for toilets is to be based on the total number of staff employed at any one time within the building. |
| 3 Staff Rest Room | | | Refer to Scale 47 |
| 4 Changing/Locker Room | | | Refer to Scale 40 |
| 5 Civilian Staff Mess Room | | | Refer to Scale 9 |
| 6 Cleaners' Room | | | Refer to Scale 1 Annex B |
| 7 Car Park | | | Refer to Scale 17 |

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