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GUIDED WEAPON LOADING PLATFORM (4GA/1440-99-2557798)

**GENERAL AND TECHNICAL INFORMATION (-1)
GENERAL ORDERS AND MODIFICATIONS (-2)**

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SERVICE AMENDMENT LEAFLET (SAL)

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CONTENTS

Preliminary material	Page
Front cover (title page)	(i)
Amendment record sheet	(iii)
SAL record sheet	(iii)
Contents (this list)	(iv)
Preface	(v)
Associated publications	(vi)
Warnings and Cautions	(vii)
Modification record	(viii)
 GENERAL AND TECHNICAL INFORMATION (-1)	
Title page	(i)
Chapter	
1 Description and operation	
 GENERAL ORDERS AND MODIFICATIONS (-2)	
Title page	(i)
Preface	(ii)
General Orders	
General Orders (title page)	(i)
General Orders List	1
Modifications	
Modifications (title page)	(i)
Equipment Modification List	1

PREFACE

AMENDMENTS

1 Each page of this publication bears the date of issue. Red Indicating arrows bracketing red text (▶ for example ◀) will indicate new or amended technical matter. The amendment process is detailed in MAP-01.

2 Queries concerning the content of this publication, or proposals for amendment, are to be addressed to the Air Commodities Team Engineering Authority, AC AFV2a2.

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6 As directed by the publication sponsor.

ASSOCIATED PUBLICATIONSReferenceTitle

MAP-01	Manual of Maintenance and Airworthiness Process
JDP 0-01.1	United Kingdom Glossary of Joint and Multinational Terms and
JSP 375	MOD Health and Safety Handbook
JSP 515	MOD Hazardous Stores Information System Definitions
JAP(D) 100E-10	Management of Ground Support Equipment
AP 100B-01	RAF Engineering Policy and Regulations
AP 100C-10	RAF Quality and Assurance Activity Manual
DAP 110H-0005-2(NR)	Armament Ground Support Equipment
DAP 119F-0001-5F	Aircraft GSE, General Information, Maintenance Schedules

WARNINGS AND CAUTIONS

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH)

7 Make sure you know the safety precautions and first aid instructions before you use a hazardous substance.

7.1 Read the label on the container in which the substance is supplied.

7.2 Read the data sheet applicable to the substance.

7.3 Obey local orders and regulations.

WARNINGS

NONE.

CAUTIONS

None.

MODIFICATION RECORD

8 The following record confirms that this publication incorporates all technical changes necessitated by the modifications listed below. Information on modification titles, classification categories and mark application is given in DAP 110H-0248-2.

Mod No	Modification title
WE 12254	To Increase the SWL to 500 kg

TOPIC -1
GENERAL AND TECHNICAL INFORMATION

CHAPTER 1

DESCRIPTION AND OPERATION

CONTENTS

Para

LEADING PARTICULARS

- 1 Introduction
- 2 Description
- 3 Platform assembly
- 6 Supports
- 7 Upright assemblies
- 8 Upright support assemblies
- 9 Lower support assemblies
- 10 Handles
- 11 Earthing
- 12 Method of use
- 13 Dismantling/assembly
- 14 Support assemblies
- 16 Upright assemblies
- 18 Castors
- 20 Earthing leads
- 22 Servicing

Table

Page

1	Assemblies	3
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Fig

1	Guided Weapon Loading Platform	2
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LEADING PARTICULARS

Reference No	4GA/1440-99-2557798
Manufacturer's Part No	0-0WE-208237
GSE Type Code	N/A (Minor GSE)
Length (one handle extended)	3890 mm (153.2 in)
Width	900 mm (35.4 in)
Height (max)	1400 mm (55.1 in)
Weight	195 kg (429 lb)
Safe working load	500 kg (1102 lb)

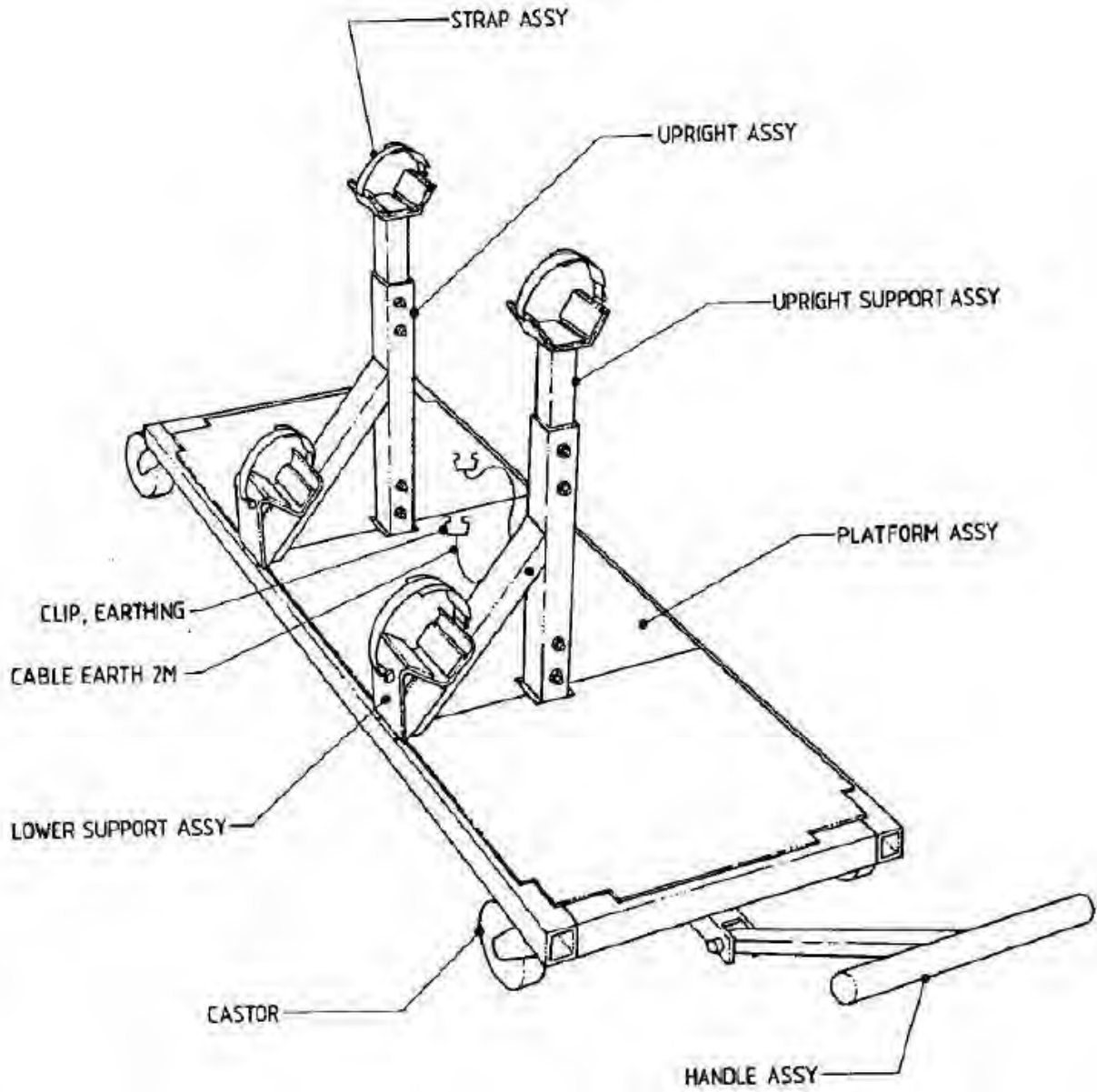


Fig 1 Guided Weapon Loading Platform

INTRODUCTION

1 The guided weapon loading platform is used to facilitate the movement and loading/unloading of weapons in a Hardened Aircraft Shelter (HAS). The platform can support four loading personnel and two guided missiles.

DESCRIPTION (Fig 1)

2 The platform is comprised of the assemblies listed in Table 1.

TABLE 1 ASSEMBLIES

Assembly (1)	Part No (2)	Qty. (3)
Platform assembly	0-OWE-208238	1
Upright support assembly	1-OWE-208240	2
Lower support assembly	1-OWE-208241	2
Upright assembly	1-OWE-208242	2
Handle assembly	1-OWE-208243	2
Castor	1-OWE-208266	4
Strap assembly	1-OWE-208372	4
Lead earthing	3-OWE-208268	2
Clip, earthing	WE-B-122422	2
Strip, earthing	WE-A-131032	1

Platform assembly

3 The platform assembly comprises a square section steel frame with two mounting spigots welded to cross members on the centre line, and two pairs of mounting plates welded to the left hand side of the frame. The decking is formed by three steel tread plates riveted to the top of the frame.

4 Square section steel tubes welded to the underside of each end of the platform provide stowage and attachment points for two handles.

5 The platform is supported at each corner by fully castoring braked nylon wheels. Earthing is provided by means of a rubberized earthing strip attached to a cross member and allowed to lie in contact with the ground.

Supports

6 Two upright, upright support and lower support assemblies together provide the means to support two weapons on the platform.

Upright assemblies

7 Two upright assemblies each comprise two square section steel tubes welded to form an inverted 'Y'. The uprights locate, and are secured by nuts and bolts, on the platform mounting spigots; with the angled limbs secured between pairs of mounting plates on the platform side.

Upright support assemblies

8 The upright support assemblies each consist of a square section steel tube welded to a rubber-lined trough. The supports locate into the upright assemblies, and are secured by nuts and bolts at the desired height using the appropriate holes in the upright assemblies. Straps are provided to restrain the weapon when loaded on the support.

Lower support assemblies

9 The lower support assemblies each comprise a steel 'vee' shaped rubber-lined trough. The supports are secured to the angled limbs on the upright assemblies in one of three positions, depending upon the desired height, by nuts and bolts. Straps are provided to restrain loaded weapons.

Handles

10 A steel 'T' shaped handle is attached or stowed (see para 4) at each end of the platform. Holes drilled at each end of the handle shank enable the handle to be secured by a 'pip' pin, in either the extended or stowed position, to the handle stowage tube.

Earthing

11 The platform is earthed as described in para 5. When weapons are loaded on to the supports, earthing cables connected to a stud on one of the upright assemblies are connected by means of a clip to the weapon suspension lug.

METHOD OF USE

12 The platform has been designed to carry a maximum of two missiles when being moved, and additionally, to support the weight of four men when stationary during loading/unloading operations as follows:

- 12.1 Ensure the castor brakes are applied.
- 12.2 If necessary adjust the height of the upright and lower support assemblies as follows:
 - 12.2.1 Remove and retain the nuts and bolts securing the support assemblies to the upright assemblies.
 - 12.2.2 Adjust the support assemblies to the required height on the upright assemblies.
 - 12.2.3 Secure the support assemblies to the upright assemblies using the nuts and bolts removed at para 12.2.1.
- 12.3 Extend one or both handles, as required, by removing the 'pip' pin from the handle stowage, withdraw the handle until the 'pip' pin can be re-inserted through the stowage and handle.
- 12.4 Release the castor brakes, manoeuvre the platform to the area where missile loading is to take place. Apply the castor brakes.
- 12.5 Load the platform and secure the missiles with the restraining straps. Attach the spring clips of the earthing leads to the missile suspension lugs.
- 12.6 Release the castor brakes and move the platform to the aircraft to be loaded, or to the missile carrier as appropriate.
- 12.7 Apply the castor brakes. Unload the platform.

DISMANTLING/ASSEMBLY

13 Dismantling/assembly of the platform is limited to the support assemblies, the upright assemblies, castors and earthing leads.

Support assemblies

14 Remove and retain the two nuts, washers and bolts securing the support to the upright assembly. Remove the support assembly from the upright.

15 To assemble, locate the support assembly on the upright limb or angled limb of the upright assembly as appropriate and secure with the nuts, bolts and washers removed at para 14.

Upright assemblies

16 If necessary remove the support assemblies as detailed in para 14. Remove and retain the two nuts, bolts and washers securing the angled limb to the mounting plates at the side of the platform. Remove and retain the two nuts, bolts and washers securing the upright limb to the mounting spigot. Remove the upright assembly.

17 To assemble, locate the upright assembly on to the mounting spigot with the angled limb located in the two side mounted mounting plates. Secure using the nuts, bolts and washers removed at para 16. Refit the support assemblies as detailed in para 15.

Castors

18 Apply the castor brakes. Support the corner of the platform appropriate to the castor being removed. Remove and retain three nuts, bolts and washers securing the castor to the platform. Remove the castor.

19 To assemble, locate the castor to the underside of the platform, secure using the three nuts, bolts and washers removed at para 18. Remove the support from the platform corner.

Earthing leads

20 Remove and discard the pin from the earth stud on the upright assembly. Remove and retain the wingnut, stiffnut and washer securing the earthing leads. Remove the earth leads.

21 To assemble, locate the earth leads on to the earth stud and secure using the washer, stiffnut and wingnut removed in para 20. Insert a new pin (NSN 5315-99-1387748) into the earth stud and bend around the earth stud.

SERVICING

22 The equipment is classified as Minor GSE and the servicing of the equipment is the Users responsibility, refer to JAP(D) 100E-10. Servicing procedures can be found in AP 118U-0401/0501/1501-5F for servicing and to missile Topic 5A1 for servicing periods.

TOPIC -2
GENERAL ORDERS AND MODIFICATIONS

PREFACE

- 1 Material issued for inclusion in this Topic 2 should be inserted in the following order:
 - 1.1 Preface. This page.
 - 1.2 General Orders. These leaflets are identified by the prefix "GO" to the leaflet numbers and should be inserted in numerical order.
 - 1.3 Equipment Modification List. This list shows all approved MOD modifications affecting the subject of this Topic 2, including those for which leaflets will not be issued. This list will be re-issued periodically. As modification leaflets are inserted, suitable entries should be recorded in the applicable columns of this list.
 - 1.4 Modification Leaflets. Leaflet's bear numbers allocated in sequence as the leaflets are sent to press and should be inserted in numerical order.

GENERAL ORDERS

GENERAL ORDERS LIST

GO No	General Order Title	Leaflet No
None	None	None

MODIFICATIONS

**EQUIPMENT MODIFICATION LIST
GUIDED WEAPON LOADING PLATFORM
4GA/1440-99-2557798
GSE TYPE CODE – N/A (MINOR GSE)**

Mod No	Contract Mod No	Mod Plate Strike No	Modification Title	Class	Leaflet No
WE12254			To Increase the SWL to 500 kg	C/3	1

To increase the SWL to 500 kg**Leaflet 1****Guided Weapon Loading Platform (4GA/2557798)****Mod No: WE 12254 (Class C/3)****File Ref: D/SMS90/I0/24/63 I****ADP No: GW 122540****Modification Sponsor: SM(WPNS) 18b(RAF)**

To increase the SWL to 500 kg.

1. INTRODUCTION

The Service has reported that when operated, the equipment needs to support four personnel and two missiles, not three personnel and two missiles as stated in AP 110H-0248-1. This loading may exceed the permitted safe working load (SWL) of 410 kg.

The contractor has assessed by calculation that the current structure will meet the new requirement without structural changes to the equipment. The modification therefore only changes the SWL marking by replacement of the SWL label.

Proof installation is not required for this modification

(1) This modification does not supersede, partially supersede or satisfy the work called for by any other modification, Service Modification, or Special Instruction (Technical).

2. EMBODIMENT

This modification is to be embodied on receipt of the modification Kit.

3. APPROXIMATE TIME FOR EMBODIMENT

The work will take approximately three man-hours. (One to embody and two hours to proof load).

4. DRAWINGS REQUIRED

Drawing No WE 12254-1 is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

(a) The modification kit which consists of the following contractor supplied items will be assembled by No 16MU wider Ref No 4GA/100433.

(i) Items supplied by the contractor:

Reference No	Part No	Nomenclature	Qty	Class of Equipment
-	3-0WE-2084 19	Label SWL	1	-
5305-99-1205483	BS4174 Type B	Screw, steel, slotted pan hd, No 4 x 6.35 mm lg, zinc-plated	2	-

All Units are to demand their requirements for kits, as listed above, in accordance with their current supply regulations.

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification, however, facilities capable of proof loading the Guided Loading Platform to the requirements of Drawing No WE 12254-1 and the following paragraph 9 are required.

6. MODIFICATION OF SPARES

No spares are affected by this modification.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

There are no changes of reference, part or assembly numbers as a result of this modification.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations:

(1) Remove the two self-tapping screws retaining the SWL label located on the longitudinal platform. Retain parts for later disposal.

(2) Clamp the new SWL label, Drawing No: 3-0WE-208419, approximately 6 mm below the previous position and, using the label as a template, drill two holes 2.6 mm diameter through the platform and retain label, de-burr holes.

(3) Attach new label using two self-tapping screws Type B, No 4 x 4 mm long (5305-99-1205483).

9. SPECIAL TESTS AFTER EMBODIMENT

When the modification has been embodied and inspected do the following special tests:

- (1) The Guided Weapon Loading Platform is to be subjected to the proof load indicated below (which is twice the SWL) and in the proof loading diagram, Figure 1.
 - (a) Position the Guided Weapon Loading Platform on a firm and level surface and ensure that the castors are facing outwards in the longitudinal plane.
 - (b) Position the six discrete loads as shown in Figure 1. Maintain the load for a minimum of one minute.
 - (c) On removal of the loads check that no damage or distortion to the structure has occurred.
 - (d) Prepare a Proof Load Certificate.

10. RECORDING ACTION

When this modification has been embodied and tested in accordance with current authorised procedures, the following recording action is to be taken: Enter embodiment of modification in the appropriate records and strike-off "2" on the strike-off label.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts rendered redundant by the embodiment of this modification are to be disposed of as scrap iaw local supply instructions.

Reference No	Part No	Nomenclature	Qty	Class of Equipment
-	3-0WE208265	Label SWL	1	-
-	BS4174 Type B	Screw, steel, pan hd, self tap, No 4 x 6.35 mm lg	2	-

12. EFFECT ON MASS AND MOMENT

This modification has no effect on mass or moment.

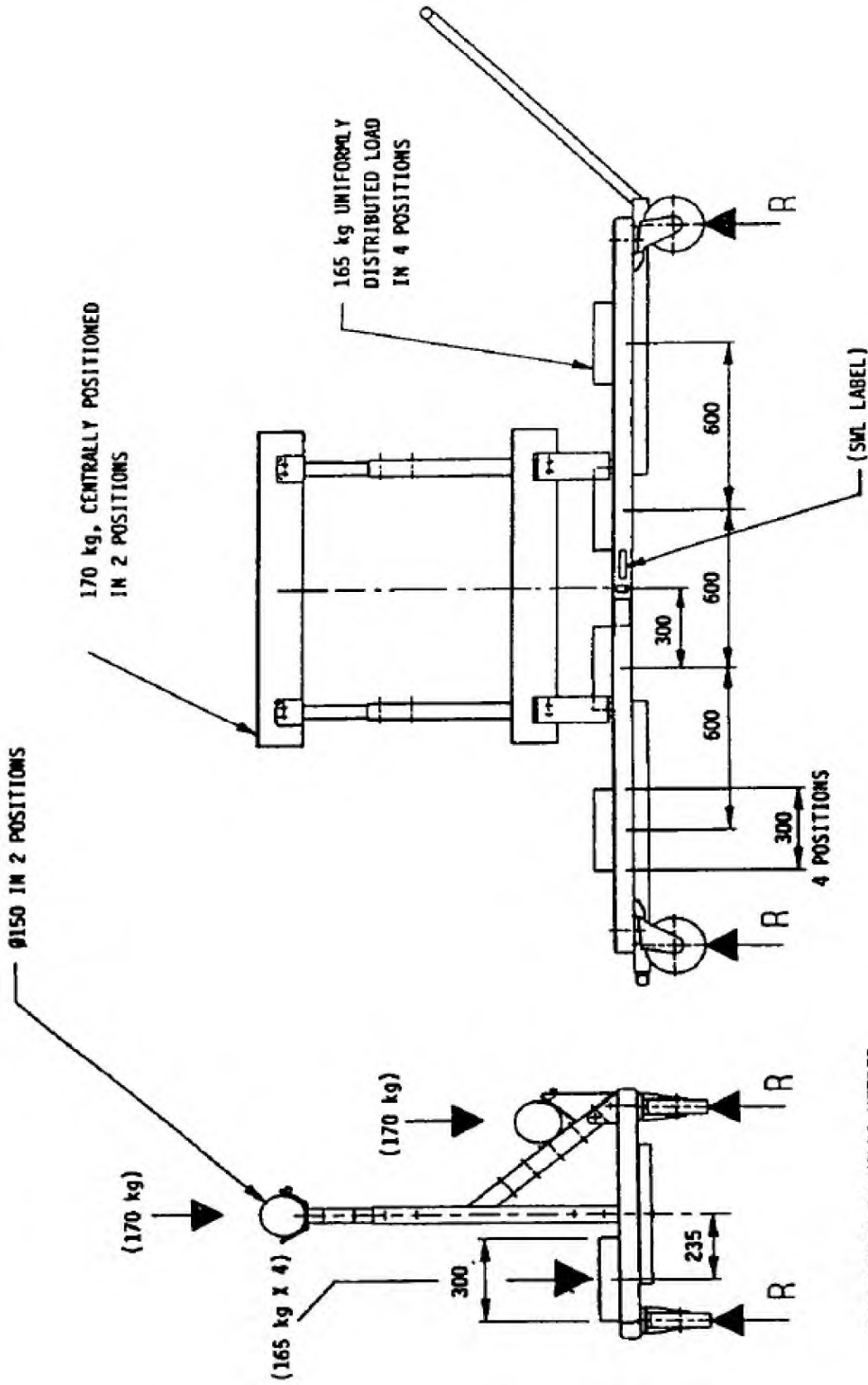
13. EFFECT ON EQUIPMENT OPERATION AND HANDLING

This modification has the following effect on operation and handling:

- (1) The platform may support four personnel when stationary during loading/unloading operations.

14. EFFECT ON MAINTENANCE AND GROUND SUPPORT EQUIPMENT

- (1) This modification has no effect on maintenance and ground support equipment.
- (2) All relevant publications will be considered for amendment action to account of the changes introduced by this modification.



DIMENSIONS IN MILLI-METRES

Fig 1 Drawing No WE 12254-1