

## CHAPTER 32

### WEAPON UNLOADING FACILITIES (WUF)

#### INTRODUCTION

3201. **Aim.** Although SA unloading facilities are not ranges, they have been included in this Volume for convenience. This Chapter describes their construction and in particular:

- |    |                             |             |
|----|-----------------------------|-------------|
| a. | Introduction                | 3201 - 3203 |
| b. | Unloading bay construction  | 3204 - 3207 |
| c. | Portable unloading facility | 3208 - 3209 |

3202. **Purpose.** Guards and patrols carrying loaded SA require an area for safe loading and unloading drills. The unloading bays described in this Chapter are intended for all Service SA used in accordance with established drills under supervision.

3203. **Limitations.** As the unloading facility is intended to capture the occasional round which has been fired unintentionally, the danger from backsplash cannot be eliminated due to the proximity of the firer to the sand. The unloading facility is not to be used for testing or any other deliberate firing of a SA.

#### UNLOADING FACILITY CONSTRUCTION

3204. **Siting.** Unloading facilities are intended for outdoor use but may be inside a building if there is no other option. The prime consideration in siting is convenience of use. Ideally the facility should be built against the wall of an existing brick building with no windows or doors close by but it is essential that the back wall of the facility is built and that the bullet catcher is not simply built against an existing wall. Instructions for use where required are derived from local risk assessment.

3205. **Facility Materials.** The facility may be constructed in any form providing the ballistic safety requirements of this Chapter are met.

3206. **Bullet Catcher.** The permanent unloading facility normally includes a sand or rubber bullet catcher, details of which are given in Chapter 2. It is essential to safety that the correct grade of sand or rubber is used and maintained in a loose state at an angle of 34° (600 mils). The sand or rubber profile has to be maintained to the levels marked on the facility's side and back walls. For low velocity weapons .22 in, 9mm, the depth required to contain a round is 750 mm(S) 500 mm(C), for high velocity weapons the depth should be 1000mm(S) 900 mm(C). The depth can be achieved by elevating the standing position for unloading, so that the barrel is pointed down at an angle into the sand unloading facility. A low velocity bullet catcher must be clearly signed detailing which weapons are permitted.

3207. **Cladding.** As an additional safety feature, the walls are timber clad, which reduces but does not eliminate danger if struck.

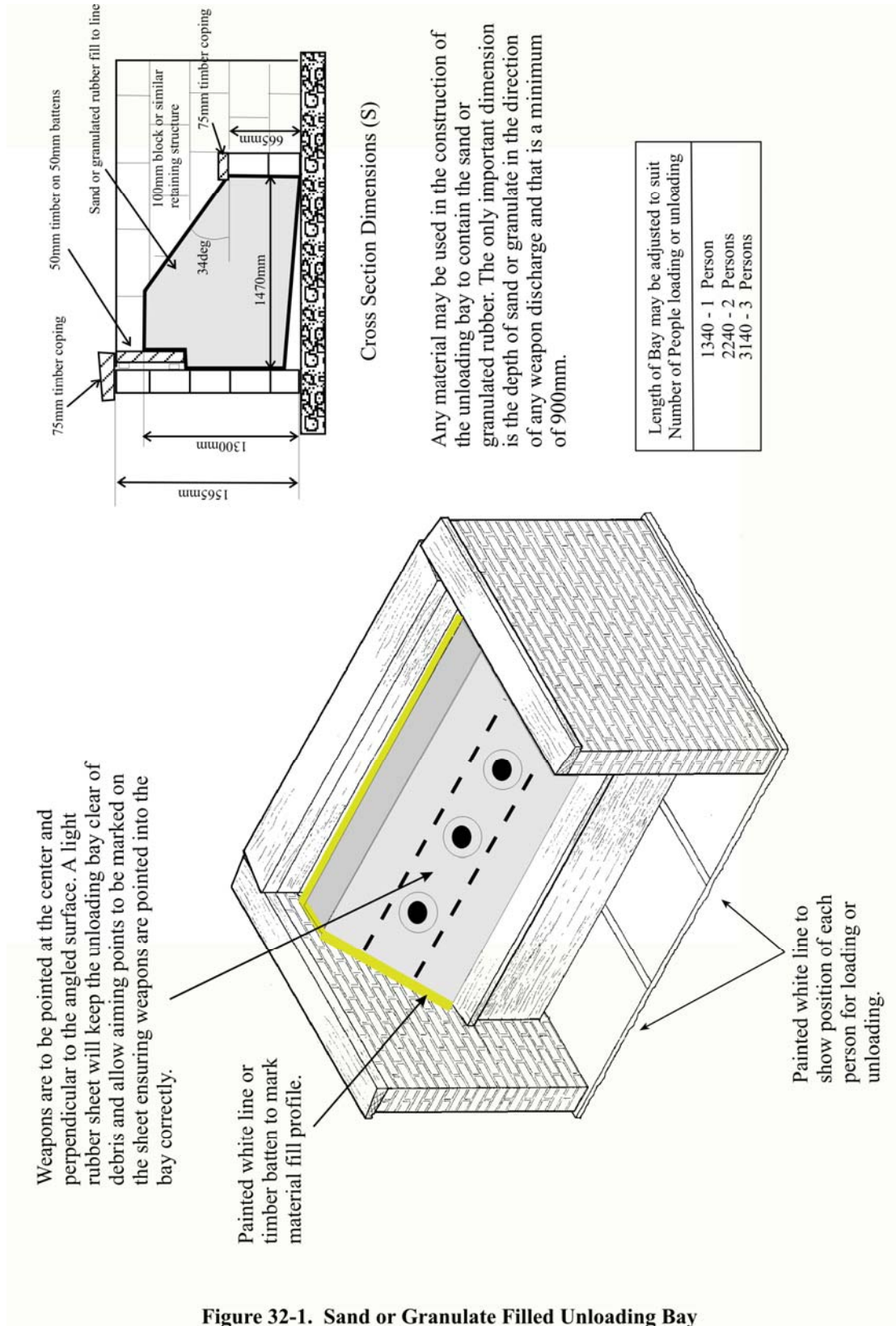
## **PORTABLE UNLOADING FACILITY**

3208. It is recognised that sand unloading facilities are permanent structures not well-suited to changing operational conditions. A portable unloading facility must meet the requirements set out in paragraph 3209 below. Details of portable Weapon Unloading Facilities may be obtained from TAS(RE).

### **DESIGN**

3209. To be safe a WUF must meet the following criteria.

1. Capture without penetration, ricochet or backsplash all rounds that might be fired into it. JSP 403 Vol.2 provides material performance details.
2. The bullet impact area must be large enough to eliminate the chance of a bullet striking anything other than the trap, or
3. The muzzle is fully contained in a tube or flared aperture. If a tube is used, consideration must be given to venting muzzle blast.
4. The design must be intrinsically safe, no hidden attrition. Weapons held in the unload position point naturally at the intended point of impact.
5. Where pistols are to be unloaded the design must take account of the unloading drills in that the muzzle may be drawn back during the unload.



**Figure 32-1. Sand or Granulate Filled Unloading Bay**