- 1. Country of Approval and Approval Reference as given in the example on line 1. (The country of Approval should be indicated by means of the distinguishing sign used to indicate country of registration of motor vehicles in international road traffic).
- 2. Date (month and year) of manufacture.
- 3. Manufacturer's identification number of the container or, in the case of existing containers for which that number is unknown, the number allotted by the Administration.
- 4. Maximum Operating Gross Weight (kilogrammes and lbs.).
- 5. Allowable Stacking Weight for 1.8 g (kilogrammes an lbs.).
- Transverse Racking Test Load Value (kilogrammes and lbs).
- 7. End Wall Strength to be indicated on plate only if end walls tare designed to withstand a load of less or greater than 0.4 times the maximum permissible payload, i.e. 0.4 P.
- 8. Side Wall Strength to be indicated on plate only if the side walls are designed to withstand a load of less or greater than 0.6 times the maximum permissible payload, i. e. 0.6 P.
- First maintenance examination date (month and year) for new containers and subsequent maintenance examination dates (month and year) if Plate used for this purpose.

#### ANNEX II

#### STRUCTURAL SAFETY REQUIREMENTS AND TESTS

#### Introduction

In setting the requirements of this Annex, it is implicit that in all phases of the operation of containers the forces as a result of motion, location, stacking and weight of the loaded container and external forces will not exceed the design strength of the container. In particular, the following assumptions have been made:

- (a) the container will be so restrained that it is not subjected to forces in excess of those for which it has been designed;
- (b) the container will have its cargo stowed in accordance with the recommended practices of the trade so that the cargo does not impose upon the container forces in excess of those for which it has deen designed.

#### Construction

- 1. A container made from any suitable material which satisfactorily performs the following tests without sustaining any permanent deformation or abnormality which would render it incapable of being used for its designed purpose, shall be considered safe.
- 2. The dimensions, positioning and associated tolerances of comer fittings shall be checked having regard to the lifting and securing systems in which they will function.
- 3. When containers are provided with special fittings for use only when such containers are empty, this restriction shall be marked on the container.

#### Test loads and test procedures

Where appropriate to the design of the container, the following test loads and test procedures shall be applied to all kinds of containers under test:

## TEST LOADINGS AND APPLIED FORCES

TEST PROCEDURES

#### 1. LIFTING

The container, having the prescribed INTERNAL LOADING, shall be lifted in such a way that no significant acceleration forces are applied. After lifting, the container shall be suspended or supported for five minutes an then lowered to the ground.

#### (A) LIFTING FROM CORNER FITTINGS

#### INTERNAL LOADING:

A uniformly distributed load such that the combined weight of container and test load is equal to 2R.

# (i) Lifting from top corner fittings:

Containers greater than 3,000 mm (10 ft.) (nominal) in length shall have lifting forces applied vertically at all four top comer fittings.

Containers of 3,000 mm (10 ft.) (nominal) in length and less shall have lifting forces applied at all four top comer fittings, in such a way that the angle between each lifting device and the vertical shall be 30°.

## EXTERNALLY APPLIED FORCES:

Such as to lift the combined weight of 2R in the manner prescribed (under the heading TEST PROCEDURES).

# (ii) Lifting from bottom corner fittings:

Containers shall have lifting forces applied in such a manner that the lifting devices bear on the bottom corner fittings only. The lifting forces shall be applied at angles to the horizontal of: 30° for containers of length 12.000 mm (40 ft.) (nominal) or greater;

37° for containers of length 9.000 mm (30 ft.) (nominal) and up to but not including 12.000 mm (40 ft.) (nominal), 45° for containers of length 6.000 mm (20 ft.) (nominal) and up to but not including 9.000 mm (30 ft.) (nominal), 60° for containers of less than 6.000 mm (20 ft.) (nominal).

### (B) LIFTING BY ANY OTHER ADDITIONAL METHODS

### INTERNAL LOADING:

A uniformly distributed load such that the combined weight of container and test load is equal to 1.25 R.

## EXTERNALLY APPLIED FORCES:

Such as to lift the combined weight of 1.25 R in the manner prescribed (under the heading TEST PROCEDURES).

### (1) Lifting from fork lift pockets:

The container shall be placed on bars which are in the same horizontal plane, one bar centred within each fork lift pocket which is used for lifting the loaded container. The bars shall be of the same width as the forks intended to be used in the handling, and shall project into the fork pocket 75 per cent of the length of the fork pocket.