

Mil-Standard 810E

I-3.6 Procedure IV – Transit Drop

- a. **Application.** Procedure IV is intended for equipment in its transit or combination case as prepared for field use (carried to a combat situation by man, truck, rail, etc.) It is to determine if the test item is capable of withstanding the shocks normally induced by loading or unloading of equipment.
- b. **Restrictions.** Procedure VI is not intended for shocks encountered in a normal logistic shipping environment as experienced by shipping containers.
- c. **Test conditions.** Test levels for the test are shown in table 516.4-II. The test item shall be tested in the same configuration that is used in a combat situation. For test items under 45kg (100 pounds), the 26-drop requirement may be divided among up to five copies of the same test item if desired, in any combination.

- d. **Rationale.** Levels for this test were set by considering how a field equipment item might commonly be dropped. For example a light equipment item might be carried by one man chest high; thus, it could drop 122cm. Field data have shown that a typical piece of man-portable equipment will be dropped from heights up to 122 cm (48 inches) an average of four to six times during its life cycle. The 26-drop requirement exists to insure that each vulnerable position (Faces, edges, and corners) of a typical test item receives an impact.

II-1.2.1 Apparatus. Test facility.

Drops for equipment mass up to 454 Kg (1000 pounds) and having its largest dimension less than 91 cm (36 inches) shall be made from a quick-release hook, or drop tester. The floor or barrier receiving the impact shall be of two-inch plywood backed by concrete. For equipment over 454 kg the floor barrier shall be concrete.