Performance Oriented Packaging testing of Escapement Assembly for M550 Fuze (U)

Performance Oriented Packaging (POP) testing was successfully completed on the package design for the Escapement Assembly F/M550 Fuze. Four foot drops and stacking tests were conducted with six packages. The POP marking, 4CI/Y22/Sxx has been assigned to this item. USA/DOD/A&D/xx is the last two digits of the year package.
I REPORT NUMBER

II TITLE: Performance Oriented Packaging Testing of Escapement Assembly for M550 Fuze

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PERFORMING ACTIVITY: ARDEC

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DATE August 1988

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1. DATA:
   CONTAINER:
   TYPE: Wood Box
   UN CODE: 4C1
   NOMENCLATURE: Box, Wood
   SPECIFICATION NUMBER: MIL-B-2427
   DRAWING NUMBER: 12598465
   MATERIAL: Wood
   CAPACITY: 14 kgs (31 lbs)
   DIMENSIONS: 18 1/8 X 14 5/16 X 9 11/16
   TARE WEIGHT: 22kgs (47 lbs)

   PRODUCT:
   NAME: Escapement assembly for M550 Fuze
   DRAWING NUMBER: 8886357
   UNITED NATIONS NUMBER: n/a
   UNITED NATIONS PACKING GROUP: II
   PHYSICAL STATE: Solid
   AMOUNT PER CONTAINER: 1280

2. BACKGROUND:
   The escapement assembly for the M550 fuze was provisional packed in a
   fiberboard box/barrier bag/wood box. Due to the success of the pack in
   protecting the assembly, a technical data package (TDP) was prepared to
   implement the pack as a permanent pack. As part of the TDP, a United
   Nations Performance Oriented Packaging (UN POP) marking is required. The
   following test plan was completed to obtain a UN POP marking for the pack.

3. TEST PLAN:
   Testing was conducted in accordance with section 9.7 of "Transport of
   Dangerous Goods", third edition. Paragraph 9.7.3, Drop Test, and paragraph
   9.7.6, Stacking Test, were the only tests required for this pack.

   3a. Drop Test
       Sample size: 5 boxes
       Temperature: Ambient
       Drop Orientation (one box for each drop):
       1. Bottom
       2. Top
       3. Long End
       4. Short Side
       5. A Corner

   3b. Stacking Test
       Due to the limited number of samples, the height of actual
       containers stacked on the bottom container was 1.5 meters instead of 3
       meters, however, a weight equivalent to a 3 meter stack was placed on top
       to simulate.

4. RESULTS:
   The boxes passed all tests. The contents of the containers were not
   discharged. The packs are considered safe for international
   transportation in accordance with the United Nations Performance Oriented
   Packaging Regulations.

REFERENCE MATERIAL: