This document contains the tests performed and test results on the firing device, demolition, time delay, XM147, packed 24 per PA19 metal ammunition container, two PA19's per wirebound box for performance oriented packaging certification.

THIS REPORT CONTAINS THE TESTS PERFORMED AND TEST RESULTS ON THE FIRING DEVICE, DEMOLITION, TIME DELAY, XM147, PACKED 24 PER PA19 METAL AMMUNITION CONTAINER, TWO PA19'S PER WIREBOUND BOX FOR PERFORMANCE ORIENTED PACKAGING CERTIFICATION.
1. DATA SHEET:

Container:

Type: Box, Wood, Wirebound

UN Code: 4C1
Specification Number: PPP-B-46506
Material: wood and wire
Capacity: 1167.9 cubic inches
Drawing Number: 9366708
Dimensions: I.D. (in.): 12 1/2 X 12 1/6 X 10 3/8
Tolerance: +1/8
O.D. (reference, in.): 14 7/8 X 12 13/16 X 11 15/16
Closure (method/Type): bent wire
Tare Weight: 7 lbs.
Packed Out Container Weight (48 Firing Devices): 52 lbs.

Product:

Name: Firing Device, Demolition, Time Delay, XM147
NSN: 1375-01-340-7890
Drawing Number: 12914600
Proper Shipping Name: Fuzes, Detonating
Identification Number: UN 0257
Physical State: Solid
Quantity Per Wirebound Wood Box: 48

BACKGROUND AND TESTING:

This report contains the tests performed and test results of the Firing Device, Demolition, Time Delay, XM147 packed (24) twenty-four per PA19 metal ammunition container, (2) PA19's per wirebound box in accordance with drawing 12913801 for Performance Oriented Packaging Certification. Instead of testing this container configuration with the weight listed above, each PA19 container was loaded with steel weights weighing 34 lbs. and fiberboard filler. The final packed out weight of each wirebound box tested was 94 lbs. This is an acceptable analogy in accordance with Code of Federal Regulations Title 49. The following tests were performed in accordance with Performance Oriented Packaging test regulations of Code of Federal Regulations Title 49:

a. Stacking Test: Three wirebound wood boxes, each containing 2 PA19 containers, were placed next to each other in a compression tester under a total load of 3800 lbs. for 64 hours. This exceeds the CFR requirement which is a load these wirebound boxes would see when at the bottom of a stack of wirebound boxes measuring 10 feet high for a period of 24 hours.

b. Loose Cargo Test: The loaded wirebound boxes which underwent the stacking test were then loose cargo tested together for one hour on a table having a steel plate and restraining walls. The rpms of the machine were adjusted so a 1/16 inch thick piece of material could be moved freely between the container and the steel plate. The test duration and machine input were in accordance with the CFR requirement.

c. Drop Test: After the three wirebound boxes were loose cargo tested, they were drop tested from 4 feet onto a steel plate in the following orientations:
container orientations dropped

1  flat on top
    flat on bottom

2  flat on a long side
    flat on a short side

3  directly on a corner

These orientations are in accordance with the CFR requirement for a rectangular box.

3. TEST RESULTS: After each test, both PA19 containers remained consolidated in each wirebound box and there was no spillage or leakage of contents from any PA19 container. This is the criteria for successfully passing Performance Oriented Packaging Testing as prescribed in CFR Title 49. Therefore, this container configuration is considered safe for international shipment and in accordance with Performance Oriented Packaging Regulations.

DTIC QUALITY INSPECTED 5