

DEPARTMENT OF THE ARMY SUPPLY BULLETIN

**Mine, Antipersonnel: M16 Series,
With Fuze, Mine, Combination, M605
Ammunition Surveillance Procedures**

Headquarters, Department of the Army, Washington, DC

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1. Purpose and scope. This bulletin, when used in conjunction with SB 742-1, provides a method for determining the serviceability of Mine, Antipersonnel, M16 series, with Fuze, Mine, Combination, M605 (complete round), 1345-K092 and the serviceability of Fuze, Mine, Combination, M605 M605 (separate issue), 1345-K058. The visual inspections and function tests in this procedure will be accomplished under a centralized control program managed by the U.S. Army Armament, Munitions, and Chemical Command (AMCCOM), AMSMC-QAS-P, Rock Island, IL 61299-6000. This bulletin is to be used in the serviceability assessment of specified mine and fuze lots based on an inspection and test of individual mines and/or fuzes. The provisions of this bulletin are mandatory for use by all Department of the Army organizations within CONUS and OCONUS with an ammunition receipt, storage, and distribution mission. This bulletin is not intended for use by organizations with stocks in basic loads. SB 742-1 contains additional information pertaining to frequency of test, sample selection, defect standards, reports, and records.

2. Errors, omissions, and recommended changes. Direct reporting of errors, omissions, and recommendations for improving this bulletin is authorized and encouraged. A DA Form 2028 (Recom-

mended Changes to Publications and Blank Forms) should be completed and forwarded to Commander, AMCCOM, ATTN: AMSMC-QAS-P, Rock Island, IL 61299-6000.

3. Safety. The inspection and surveillance function testing must be conducted in accordance with all appropriate safety regulations and instructions with special attention given to technical manuals describing these mines and fuzes. A standing operating procedure (SOP) is required for this operation which must specify safety requirements. The absence of a safety regulation in this or in any other publication is not to be construed that a precaution is unnecessary. (Note: A missile (fragment) hazard exists out to a distance of 385 meters (1,263 ft) from point of functioning.

4. Personnel. Visual examination and function testing will be conducted under the direct control of a Quality Assurance Specialist (Ammunition Surveillance) hereinafter referred to as a QASAS. All personnel connected with this operation must be familiar with the testing procedures and aware of the associated hazards of the mine and fuze.

5. Size of sample. Unless otherwise directed, a sample size of 40 mines with fuzes or 40 fuzes is required for the visual inspection and surveillance function test. To satisfy requirements of the periodic inspection prescribed in conjunction with the surveillance function test, additional sampling

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and inspection of boxes and packing material may be required in accordance with SB 742-1.

6. Sample selection. Samples will be selected in accordance with the provisions of SB 742-1. The samples must be a true representation of the lot in storage. Whenever practical, only two mines should be taken from any one box (outer pack). Due to packaging configuration for separate fuze lots (K058) no more than eight fuzes should be selected from any one box. Boxes should be selected from different positions in a stack. If the samples are to be function tested at an installation other than the one at which the parent lot is stored, the packing boxes and containers will be inspected prior to shipment. To document the inspection it is important that the appropriate parts of DA Form 984 (Munitions Surveillance Report) be properly completed in accordance with requirements of SB 742-1.

7. Surveillance test equipment. The following Ammunition Peculiar Equipment (APE) is to be used for testing mines and fuzes in accordance with this procedure:

Tank, Immersion, APE 1901.

Table, Testing, APE 1903.

Device, Testing, Pressure Push and Pull, APE 1907.

Kit, Function Test, M605 Mine, APE 1907E007.

Thermometer, Cup-Cased, APE 1912.

Shield, Operational, APE 1920.

Shelter, Personnel Protection, APE 1937.

Kit, Periscope and Step Stool, APE 1937E001.

Fixture, Testing, M16 Mine, APE 1940M3.
Mine, Antipersonnel, M16A1, Inert (NSN 1345-00-799-7391).

8. Preparation for test. Assure that sample units are numbered 1 through 40 and are identified as to the boxes from which they were drawn. If a mine lot is to be tested, each fuze will have the same number as the mine with which it is to be tested. One-half of the samples (samples 1 through 20) will be preconditioned by being immersed in water prior to testing. The remaining 20 samples (21 through 40) will receive no treatment or conditioning before the function test. The function test report must indicate by sample number which mines and fuzes were immersed in water and which received no treatment or conditioning.

a. Carefully examine the fuzes which are to be water-tested for evidence of damage or missing safety pins. Assure that a rubber gasket is present around the fuze. If a mine lot is to be function-tested, assemble each fuze to be water-

conditioned with the mine having the same sample number. Using the M25 combination wrench, assure that the fuze well bushing adapters on the mines are tight, and then tighten the fuzes sufficiently to ensure a waterproof seal. Save the mine shipping plugs for use after water conditioning. If a separately issued fuze lot is to be tested, each fuze that is to be water-conditioned should be installed in a dummy or inert mine as directed above.

b. The immersion tank (APE 1901) should be used for water preconditioning. Immerse the 20 samples (1 through 20) in water at a temperature of 70 degrees +/- 10 degrees F (21.1 degrees +/- 5.6 degrees C) for a minimum of 24 hours. Ensure that each fuze is in an upright position with the prongs 6 to 9 inches (15 to 23 centimeters) below the water surface.

c. Remove the samples from the water after 24 hours and check for evidence of leaks or water damage. Unscrew the fuzes from the mines and inspect each fuze well and flash tube for water or moisture. Remove any accumulation of water by inverting the mine. Replace the shipping plug in the mine. Record the presence of water or moisture on DA Form 984 by sample number.

9. Test procedure. This test determines the pressure and the pull tension required to release the striker (firing pin) of the fuze and the ability of the mine to function as intended. Fuzes (and mines) conditioned by water (para 8) will not be static-tested (or function-tested) whenever the temperature at the test site is at or below freezing (32 degrees F or 0 degrees C). Testing will only be conducted during daylight and only when there is good visibility. Testing will not be conducted during an electrical, rain, or snow storm, or during any other conditions that might affect the test results or create a hazardous condition. Testing should also comply with all other applicable regulations, i.e., U.S. Environmental Protection Agency (EPA), local restrictions, etc.

a. Fuze static test (mine lot). The mine fuze (M605) as a component of a mine lot (M16 mine series) will be static-tested twice and then used to function the mine to which it belongs (same sample number). A static test functions only the mechanical parts of the fuze; the primer will remain intact and serviceable so that the fuze can be recocked and used to function the mine.

(1) Set up the pressure push-and-pull testing device (APE 1907) and mount it on the testing table (APE 1903) in accordance with the appropriate APE manual. The protective shield must be properly mounted on the bottom of the table as