Name(s)

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Project Number

S1808

Project Title

Will the Gas Pass?

Abstract

Objectives/Goals

Determine how well MCU-2P and M-50 Gas Mask filters protect our troops in normal, wet, and alcohol-drenched environment.

Methods/Materials

MCU-2P and M-50 mask filters were tested using a Joint Service Mask Leak Testing (JSMLT) machine. Each filter was tested many times under normal, wet, and alcohol-drenched conditions.

Results

The M-50 mask filter proved more effective than the MCU-2P mask filters in all tested environments. Within the 3 given conditions, the normal (unaltered) filter performed best, allowing the least amount of particulate into the mask wearer. The wet filters (soaked in water) allowed more particulates than the normal, and the alcohol-drenched filter provided the least amount of protection for the mask wearer.

Conclusions/Discussion

The M-50 mask filters proved superior in all conditions to the MCU-2P mask filters.

Summary Statement

Show how well Gas Mask filters protect our troops in different environments.

Help Received

Used Air Force testing equipment under supervision of MSgt Earl Edmondson