



Individual Protection Ensemble Mannequin System

IPEMS

Description

The Individual Protection Ensemble (IPE) Mannequin System will simulate soldier activities and allow for test and evaluation of individual protection ensembles against Chemical Warfare Agents (CWAs). The IPE Mannequin System will consist of an integrated IPE Mannequin, Exposure Chamber, and Control Room. The IPE Mannequin System will be installed at Dugway Proving Ground. IPEMS will be mothballed in FY13 with the possibility of being restarted in FY15 to support the UIPE 2 testing in FY17.

Mission

Support the individual protection commodity area through the development and fabrication of a novel test capability to evaluate the performance of IPEs against CWAs under simulated operational conditions.

Capabilities

- ❑ Provides system-level test and evaluation of individual protection ensembles against CWAs
- ❑ Simulates human motion and physiology to include respiration, perspiration, and skin temperature
- ❑ Provides controlled CWA dissemination to produce a wide range of challenge concentrations
- ❑ Provides Exposure Chamber environmental control to allow for IPE test and evaluation under a variety of temperatures, humidities, and wind speed and direction conditions.
- ❑ Provides near real-time under-ensemble sampling to monitor IPE penetration, such as at interface areas

Users

US Navy, US Marine Corps, US Army, US Air Force

Status

Engineering and Manufacturing Development - Anticipated Fielding: FY 2019 Q3



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Point of Contact: Chemical, Biological, Radiological, & Nuclear Information Resource Center (CBRN IRC), CBRN.IRC@mail.mil,
Toll Free: 1-800-831-4408, Commercial: (309) 782-7349, DSN: 793-7349, Fax: (309) 782-1919