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UNTIL RELEASED BY
THE HOUSE COMMITTEE
ON GOVERNMENT REFORM

STATEMENT OF
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SOLDIER AND BIOLOGICAL CHEMICAL COMMAND
BEFORE THE
HOUSE COMMITTEE ON GOVERNMENT REFORM
SUBCOMMITTEE ON NATIONAL SECURITY, VETERANS AFFAIRS,
AND INTERNATIONAL RELATIONS
OCTOBER 1, 2002
CONCERNING
CHEMICAL AND BIOLOGICAL EQUIPMENT: PREPARING FOR A TOXIC
BATTLEFIELD

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Mr. Chairman and members of the committee, I am Mr. Michael A. Parker, Deputy to the Commander of Soldier and Biological Chemical Command located in Aberdeen Proving Ground, Maryland. Today I represent Major General John Doesburg, Chairman of the Joint Service Materiel Group (JSMG) and Commander of the U.S. Army Soldier and Biological Chemical Command. As Chairman, JSMG, MG Doesburg leads a team of General Officers from each Service in the planning, programming, and budgeting of funds allocated to the Joint Service Chemical and Biological Defense program under OSD oversight. As Commander SBCCOM, MG Doesburg is responsible for supporting the respective Program Managers from each of the Services by providing the science and technology and engineering talent to develop critically needed materiel. I am pleased to appear before you today to discuss research and development of individual protective equipment in the Joint Service Chemical and Biological Defense Program.

Since Congress passed Public Law 103-160 in 1994, Joint Service efforts have significantly improved the survivability of our war fighters on a battlefield poisoned with chemical and biological agents. We are keenly aware that, when diplomacy, deterrence, and avoidance fail, individual protection must not. I am proud to say that in keeping with the intent of the public Law, the terms of our current Joint Service Agreement, and the leadership of the Army as Executive Agent, our warfighters in all Services have the best individual protective equipment in the world, and it's going to get even better.

There are multiple types of systems currently being developed and fielded within the area of individual protective equipment. There are ground systems, aviation systems, masks, clothing ensembles and testers. These systems are designed to allow warfighters to fight and win in any battle environment. As time progresses, the Joint Service Chemical and Biological Defense Program is capturing technology and translating it into combat capable systems that enhance the effectiveness of the individual Soldier, Sailor, Airman and Marine on the battlefield.

There are many systems currently in development. The following six (6) systems represent the most significant developmental efforts in individual protective equipment.

The Joint Service General Purpose Mask is currently in development. It will be the standard field protective mask for the U.S. Armed Forces. This mask will provide improved protection, be lighter than current masks, have reduced breathing resistance, have an improved field of view, have lower weight and bulk and be more compatible with other equipment. The fielding of a single standard field protective mask will not only enhance the performance of warfighters, it will enhance logistics effectiveness and reduce total ownership costs. The Joint Service General Purpose Mask is projected to begin fielding in FY06.

The Joint Service Chemical Environment Survivability Mask will bring a new capability to U.S. armed forces. It will be a lightweight, low bulk, short duration protective mask and hood (above the neck, head, eye, and respiratory ensemble) capable of protecting the individual from anticipated low levels of chemical and biological agents, radioactive particles, and selected toxic industrial materials contamination. The mask is intended to provide commanders at all levels with greater options for protection, especially in operations other than war. It will be one-size-fits-all, inexpensive and disposable. The Joint Service Chemical Environment Survivability Mask is projected to begin fielding in FY05.

The Joint Service Aircrew Mask will be the standard nuclear, biological and chemical aircrew protective mask for all U.S. armed forces. This family of aviation masks will provide nuclear, biological and chemical protection to all aircrews and will simultaneously integrate with pressure breathing for G systems in high performance aircraft. The Joint Service Aircrew Mask is being designed to reduce the heat stress imposed by current systems and can be donned and doffed in flight. It is compatible with the gamut of existing and co-developmental aircrew life support equipment. The Joint Service Aircrew Mask is projected to begin fielding in FY06.

The Joint Service Mask Leakage Tester will be a portable, unit level device that is one-man transportable, capable of determining serviceability and proper fit and identifying defective or unserviceable components of current and future NBC

protective masks. Due to its compact size, improved diagnostics and ability to test multiple masks simultaneously, the tester will improve unit nuclear, biological and chemical equipment maintenance programs and promote a higher state of readiness. The Joint Service Mask Leakage Tester is projected to begin fielding in FY03.

The Joint Service Protective Aircrew Ensemble will be used in conjunction with above-the-neck individual head-eye-respiratory protection by rotary wing and fixed wing aircraft personnel. The ensemble will allow aircrew to fly throughout their operating envelope in an actual or perceived chemical and biological warfare environment. The ensemble will be suitable for performing all normal and emergency procedures, both in-flight and on the ground. It will provide the ability to fully exploit combat capabilities in a chemical and biological environment while reducing heat stress induced by existing aircrew chemical and biological protective garments. The Joint Protective Aircrew Ensemble is projected to begin fielding in FY05.

The Joint Service Lightweight Integrated Suit Technology ensemble consists of multiple components. The overgarment consists of a top with integrated hood and trousers. The ensemble also contains multipurpose overboots and protective gloves. When worn with a field protective mask, the system will provide complete head-to-toe protection from chemical and biological agents and radiological particulates. The overgarment is designed to provide 24

hours of protection after 45 days of wear. The overgarments and multipurpose overboots are currently being produced and will take the place of preexisting individual protective equipment held by the services and special operating forces. Protective gloves are currently under development and are projected to be fielded beginning in FY03.

Recent and current technology projects support both ongoing and future individual protective equipment research and development programs. Within these technology projects, new and improved material technologies and new design concepts are key to advancing the state-of-the art in protective ensembles for warfighters. New and improved materials offer the potential for lighter, more durable and more comfortable ensembles, smaller filters, end-of-service-life indicators and protection from a wider array of chemical and biological agents.

Multiple laboratories, including those located at the Natick Soldier Systems Center, are working vigorously to prove new design concepts and new protective technologies. Current and recent technology projects include projects to develop material treatment technologies for protective suits, reactive materials for protective suits, lightweight materials for protective suits, permeable selective membrane technologies for suits, end-of-service-life indicators for filters, new filtration technologies, new mask materials and new protective equipment modeling methods. The objective of this technology development is to reduce the physical burden on warfighters while providing enhanced protection and

improved logistics. Developing the technology and end items within a system of systems approach that is focused on reducing the overall number of items or systems used to protect the soldier is our overall objective. As a result, the overall logistics burden will be reduced to the soldier and Army will benefit, as we are able to take advantage of streamlined business practices for inventory management and item surveillance. In the end the soldier will be better equipped at lower overall cost.

Mr. Chairman and members of the committee, in closing I would like to thank you for the opportunity to discuss the development of individual protective equipment within the Joint Service Chemical and Biological Defense Program. I would also like to thank you for inviting MG Doesburg to the hearing and allowing me to testify before you today in his stead. We will continue to do all we can to meet the materiel needs of our nation's operating forces and capitalize on advancements in technology.

Subject to your questions, this completes my testimony.