

## ISRP 1999 abstract

Presenter/author	Title	Abstract
<b>Hammer, Alexis Mathers, G.</b>  <i>Chemical and Biological Defense Sector, DERA Porton Down Protection &amp; Decontamination Salisbury, Wilts SP4 0JQ UK</i>	<b>Military Respiratory Protection</b>	<p>The basic design of respiratory protection equipment for military use has changed little since the advent of modern chemical warfare in 1917. Improvements in engineering have centred on the optimisation of the respirator canister for broad band protection against war gases, and increasing the performance of face seal design. However, as the role of the soldier has evolved to meet the demands of the modern battlefield, so the design of the respirator must also evolve.</p> <p>Aside from the traditional design driver of Protection; new design criteria were established. The UK respirator programme has defined Increased Operational Effectiveness as the prime driver for respirator research. Improving Situational Awareness, Compatibility with Optical Sights &amp; Imaging Systems, Systems Integration, and Reducing Physiological Burden were all defined a performance targets for new respirator research. In order to make this technical leap in respirator design and performance, a new User Based design methodology has been established. This process has enabled early definition of the detail specification, system concepts, research strategy, and the evaluation criteria for the respirator programme. This user based design approach is described.</p>