

**Respiratory Protection for Military Aircrew**

**Alex Rowbotham**

Dstl, Building 415, Dstl Porton Down, Salisbury, Wiltshire SP4 0JQ, UK

Tel: +44 1980 613751 Fax: +44 1980 613611

E-mail: [asrowbotham@dstl.gov.uk](mailto:asrowbotham@dstl.gov.uk)

**ABSTRACT**

The UK Ministry of Defence is developing new respiratory protection solutions for its rotary wing, multi engine and fast jet aircrew. Research has examined the present equipment and understood how this needs to improve the physiological and psychological burden placed upon the user. Requirements have been identified that are specific to aircrew users and reflect their personal, platform and operational needs. These requirements cover environmental conditions, altitude performance, breathing gas supply, integration with equipment, physical comfort and seal performance. Three types of respiratory solution are in development to provide a range of solutions for the future military user. From the technologies and design innovations that these solutions present, industry will be asked to develop suitable products that can be brought into service.

© crown copyright 2004 Dstl