

Abstract for 3<sup>rd</sup> NLW European Symposium.

## **Optical Distraction and Disorientation**

Authors: Allan Gibson, Ross Ives, Grant Perkins (QinetiQ Electro Optic Systems and Product Group), Eric Liggins (QinetiQ, Centre Human Sciences)

Keywords. Non Lethal Weapon, Optical Distraction and Disorientation

Optical distraction and disorientation devices are designed to temporarily deny vision and cause the target to become disorientated and distracted in their environment. Research has concentrated on providing a dazzle capability using low powered laser and broadband source technology. The concept of dazzling targets at predetermined ranges relies on sufficient energy being delivered at the eye to cause the desired effect with minimal risk of injury.

It was considered that the combination of different coloured light sources that alternate may increase the disruptive effect on the target. If the effect could be increased using this technique then system designers would have a choice of either increasing the effective range of the system or reducing the systems power. This paper will present the results of research that was conducted to determine if alternating wavelengths would increase the perceived dazzle effect.