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David H. Titterton
Mark A. Richardson
Editors

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Introduction

The purpose of this conference was to provide a technical forum for the discussion and dissemination of information on optical, electro-optical, and infrared technologies as applied to the countermeasure role in security and defence.

Since the polished shields of antiquity that were used to reflect the sun into the enemy's eyes, optics and optical systems have been used on the battlefield as a cost-effective countermeasure. The simplest modern optical countermeasure techniques can still be extremely inexpensive in comparison with the platform/weapon system that they protect. Take for example the humble infrared flare ejected from the multi-million dollar aircraft, and the smoke screen deployed to protect an armoured fighting vehicle or column of vehicles. More sophisticated defensive aid systems are being developed that can encompass sensor systems, tracking systems, active and passive countermeasures, and sophisticated control and processing systems. It was all of these techniques and their underlying technologies, from the simple to the complex, that this conference aimed to address.

The conference was packed with 23 quality papers being presented over one and a half days. Interest and attendance were high throughout; the conference room was full from wall to wall for all of the sessions. The importance of the laser in countermeasure technologies was evident by the fact that three of the sessions were focused on laser systems. Additionally, there was a session on beam steering and two sessions on general countermeasures, with topics presented as diverse as smoke modelling to helicopters on the asymmetric battlefield.

The conference kicked off with an excellent keynote address from the Director of the U.S. Department of Defense High-Energy Laser Joint Technology Office, and each session started with an invited paper. All of the papers were well received and created significant interest and subsequent questioning.

At the end, the conference attained such positive and favourable feedback that one delegate stated, "I thought that the countermeasures conference was an outstanding success - the bar has been set high for next year's event!"

We therefore commend the following papers to your attention and invite you to advance the topic of Technologies for Optical Countermeasures even further by submitting your research and development work for consideration in next year's conference.

David H. Titterton
Mark A. Richardson