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Technologies for Optical Countermeasures VI

David H. Titterton
Mark A. Richardson
Editors

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Contents

- vii *Conference Committee*
ix *Introduction*

PLENARY SESSION

- 7483 02 **Joint research for tomorrow's security and defence (Plenary Paper)** [7483-31]
R. Krug, The Federal Ministry of Defence (Germany)

LASER DEVELOPMENT

- 7483 04 **Development of military lasers for optical countermeasures in the mid-IR (Invited Paper)** [7483-02]
A. Sijan, SELEX GALILEO (United Kingdom)
- 7483 05 **Applications of high power lasers in the battlefield (Invited Paper)** [7483-03]
Y. Kalisky, Nuclear Research Ctr. Negev (Israel)
- 7483 07 **Visible and mid-IR output using a fibre laser pump source** [7483-05]
J. Beedell, I. Elder, SELEX GALILEO (United Kingdom); K. K. Chen, S. Alam, D. J. Richardson, Univ. of Southampton (United Kingdom); D. Hand, Heriot-Watt Univ. (United Kingdom)

ULTRAFAST LASERS

- 7483 08 **A review of ultra-short pulse lasers for military remote sensing and rangefinding (Invited Paper)** [7483-06]
R. A. Lamb, SELEX GALILEO (United Kingdom)
- 7483 09 **Femtosecond lasers for countermeasure applications** [7483-08]
G. C. Franssen, H. M. A. Schleijsen, J. C. van den Heuvel, TNO Defence, Security and Safety (Netherlands); H. Buersing, B. Eberle, D. Walter, FGAN-FOM (Germany)
- 7483 0A **MIR-generation with short and ultra short laser pulses using frequency conversion in periodically poled Lithium niobate** [7483-09]
G. Anstett, FGAN-FOM (Germany); F. Ruebel, J. A. L'huillier, Univ. of Kaiserslautern (Germany)

SEMICONDUCTOR LASERS

- 7483 0B **Advances in spatial and spectral brightness in 800-1100 nm GaAs-based high power broad area lasers** [7483-10]
P. Crump, H. Wenzel, G. Erbert, G. Tränkle, Ferdinand-Braun-Institut für Höchstfrequenztechnik (Germany)

- 7483 0C **Diode laser arrays for 1.8 to 2.3 μm wavelength range** [7483-11]
M. T. Kelemen, J. Gilly, m2k-laser GmbH (Germany); S. Ahlert, H. Kissel, J. Biesenbach, DILAS Diodenlaser GmbH (Germany); M. Rattunde, J. Wagner, Fraunhofer-Institut für Angewandte Festkörperphysik (Germany)
- 7483 0D **High power, high efficiency quantum cascade laser systems for directional infrared countermeasures and other defense and security applications** [7483-12]
R. Maulini, A. Lyakh, A. G. Tsekoun, R. Go, M. Lane, T. Macdonald, C. K. N. Patel, Pranalytica, Inc. (United States)

DIRCM CONSIDERATIONS

- 7483 0E **Laser pointing in the vicinity of jet engine plumes** [7483-13]
R. H. M. A. Schleijsen, TNO Defence, Security and Safety (Netherlands)
- 7483 0F **Infrared semiconductor laser modules for DIRCM applications** [7483-14]
J. Wagner, S. Hugger, B. Rösener, F. Fuchs, M. Rattunde, Q. Yang, W. Bronner, R. Aidam, K. Köhler, Fraunhofer-Institut für Angewandte Festkörperphysik (Germany); M. Raab, E. Romasew, H. D. Tholl, Diehl BGT Defence (Germany)
- 7483 0G **Laser source for DIRCM at CILAS** [7483-15]
B. Crépy, G. Closse, S. Cussat-Blanc, CILAS Orléans (France); C. Grèzes-Besset, H. Krol, CILAS Aubagne (France); J.-P. Lemette, M. Le Névé, J.-M. Melkonian, J. Montagne, P. Morin, O. Squaglia, CILAS Orléans (France); N. Valette, CILAS Aubagne (France)
- 7483 0H **Eye safe laser based DIRCM systems** [7483-16]
S. Scherbarth, A. Thum-Jäger, EADS Deutschland GmbH (Germany)

PLATFORM PROTECTION I

- 7483 0I **Analysis of first generation MANPAD attacks on fast jets** [7483-17]
J. Jackman, M. Richardson, Cranfield Univ. (United Kingdom); B. Butters, R. Walmsley, N. Millwood, Chemring Countermeasures Ltd. (United Kingdom); P. Yuen, D. James, Cranfield Univ. (United Kingdom)
- 7483 0J **MANPADS protection for civil aircraft using an expendable decoy** [7483-18]
R. H. Walmsley, Chemring Countermeasures Ltd. (United Kingdom); J. Friede, Saab Avitronics (Sweden); N. Millwood, B. Butters, Chemring Countermeasures Ltd. (United Kingdom)
- 7483 0K **A MATLAB/Simulink methodology for simulating dynamic imaging IR missile scenarios for use in countermeasure development and evaluation** [7483-19]
J. P. Tremblay, C. R. Viau, Tactical Technologies Inc. (Canada)

PLATFORM PROTECTION II

- 7483 0L **Comparison of the emission of IR decoy flare under controlled laboratory and on-field conditions** [7483-20]
C. Sánchez Oliveros, L. Martín Aragón, R. Macias Jareño, Institute of Technology Marañosa (Spain)
- 7483 0M **Improving rotorcraft survivability to RPG attack using inverse methods** [7483-21]
D. Anderson, D. G. Thomson, Univ. of Glasgow (United Kingdom)
- 7483 0N **Quantitative assessment of laser-dazzling effects on a CCD-camera through pattern-recognition-algorithms performance measurements** [7483-22]
A. Durécu, O. Vasseur, P. Bourdon, ONERA (France)
- 7483 0O **Integrated variable-fidelity modeling for remote sensing system design** [7483-23]
D. Anderson, K. Carson, Univ. of Glasgow (United Kingdom)

SUPPORTING TECHNOLOGIES

- 7483 0P **Field trials for determining the visible and infrared transmittance of screening smoke** [7483-24]
C. Sánchez Oliveros, G. Santa-María Sánchez, C. Rosique Pérez, Institute of Technology Marañosa (Spain)
- 7483 0Q **Monostatic Ladar demonstrator with micro-optical bidirectional beam control** [7483-25]
M. Rungenhagen, M. Kunz, E. Romasew, H. D. Tholl, Diehl BGT Defence GmbH & Co. KG (Germany)
- 7483 0R **Laser formed intentional firearm microstamping technology: counterinsurgency intelligence gathering tool** [7483-28]
T. E. Lizotte, O. P. Ohar, Pivotal Development Co. (United States)
- 7483 0S **Atmospheric tip/tilt compensation for laser beam tracking with amateur telescopes** [7483-29]
I. Buske, W. Riede, Institute of Technical Physics, German Aerospace Ctr. (Germany)
- 7483 0T **Tracking illicit small arms trafficking: implementation of Intentional Firearm Microstamping (IFM) to small arms and light weapons imports and exports** [7483-30]
T. E. Lizotte, O. P. Ohar, Pivotal Development Co. (United States)

Author Index

Conference Committee

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(United Kingdom)

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Ultrafast Lasers

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Platform Protection I

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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: a classical force multiplier. 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, which this conference aimed to discuss.

The conference content was even better than last year, with nearly 30 quality papers being presented over the first two days of the symposium. Interest and attendance were high throughout; the conference room was usually full, with some people having to stand for some of the sessions. The importance of the laser in countermeasure technologies was evident by the fact that a number of the sessions were focused on laser systems. Additionally, there were sessions on supporting technology and a general session on modeling and simulation.

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

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 in Toulouse.

David H. Titterton
Mark A. Richardson

