# PROCEEDINGS OF SPIE

# Ground/Air Multisensor Interoperability, Integration, and Networking for Persistent ISR IV

Tien Pham Michael A. Kolodny Kevin L. Priddy Editors

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## Introduction

The Ground/Air Multisensor Interoperability, Integration, and Networking for Persistent ISR conference focuses on research and technology for persistent surveillance applications. More specifically, the conference focuses on how to integrate and network disparate ISR elements: (i) to enable disparate sensor and information sources to be combined, fused, and/or discovered autonomously or semi-autonomously; (ii) to provide the users (e.g., analysts) with reliable and actionable information products to conduct persistent surveillance missions; and (iii) to autonomously and/or remotely (re)configure and (re)task ISR assets to adapt to changing conditions and missions.

Topical areas and applications include (but are not limited to) the following:

- Interoperability for joint operations and coalition warfare
- Persistent ISR for current operations
- Data-to-decisions (D2D)
- Tasking, collection, processing, exploitation, and dissemination (TCPED)
- Collaborative information processing and sharing, and decision making among human-based and sensor-based systems
- Distributed/decentralized sensor networks and data fusion
- Novel ISR sensing for detection, tracking, and classification
- Unmanned ISR sensors and systems
- Persistent surveillance exercises, demonstrations, and lessons learned.

In 2013, the emphasis is on D2D, coalition interoperability, autonomy, and collaborative information processing and a number of sessions are dedicated to these topics. Here are some special and joint sessions:

- Special session and panel on the Science of Autonomy
- Special government session on ISR Interoperability
- Special NATO and Coalition sessions
- Joint session on Data-to-Decisions and joint panel on Decision-Driven Analysts with conference 8758: Next-Generation Analyst
- Joint session on Networking for Netcentric Warfare with conference 8754:
   Open Architecture/Open Business Model Net-Centric Systems and Defense Transformation 2013.

Tien Pham Michael A. Kolodny Kevin L. Priddy

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