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Raja Suresh
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Introduction

These are the proceedings of the seventeenth Defense Transformation and Net-centric Systems conference. The papers presented at the conference strongly reflected the inexorable trend towards net-centric systems and multi-INT layered sensing architectures. The conference included the following joint sessions:

1. Self-organizing Collaborative Unmanned ISR Robotic Teams, held jointly with the Unmanned Systems Technology conference. Collaborative autonomous systems portend the increasing use of autonomous sensor and shooter platforms to perform the D3 (Dirty, Dull and Dangerous) missions in an era of declining force structures.
2. Sensor Networks and Wide Area Persistent Surveillance, held jointly with the Ground/Air Multi-sensor Interoperability, Integration, and Networking for Persistent ISR conference.

The conference also included invited papers by Dr. Megan Cramer, et al (US Navy) on levels of openness in Open Architecture Systems, and by Dr. Avram Bar-Cohen, et al (DARPA) on thermal management technologies for low SWaP electronic packages.

Looking ahead, we expect Net-centric systems to increasingly focus on Open Architectures (OA) and Open Business Models (OBM). Such OA/OBM systems seek to mimic the successful PC industry and hold the promise to dramatically reduce the acquisition and life cycle costs of military systems, and tremendously accelerate the rate of technology refresh in military systems.

It is gratifying to see the high level of audience interest in this conference. Particularly gratifying is the fact that this conference has resulted in the “spin-off” of several new conferences at SPIE. My sincere thanks to the distinguished invited speakers, authors, attendees, and my associates on the program committee for another successful conference.

Raja Suresh

