Defense Transformation and Net-Centric Systems 2011

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Introduction

These are the proceedings of the sixteenth 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 special sessions:

Self-Organizing, Collaborative, and Unmanned ISR Robots, held jointly with the Unmanned Systems Technology conference. Collaborative autonomous systems portend the increasing use of autonomic sensor and shooter platforms to perform the D3 (Dirty, Dull, and Dangerous) missions in an era of declining force structures.

Sensor Networks and Wide-Area Persistent Surveillance, held jointly with the Ground/Air Multisensor Interoperability, Integration, and Networking for Persistent ISR conference.

The conference also included invited papers by Dr. Jagadeesh Pamulapati (White House Office of S&T Policy) on national policies for stimulating technological innovation and Dr. Muralidhar Rangaswamy (Technical Advisor, AFRL) on a vision for fully adaptive Radar.

Looking ahead, we expect net-centric systems to be increasingly deployed in the field as C4ISR systems undergo their own “revolution.” We expect to focus in the future on the networking of sensors and shooters from space to the mud to provide ubiquitously persistent surveillance, as well as distributed collaborative teams of robotic platforms.

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