

## **MONDAY, 31 JULY**

1300 DETEC Industry Day, Kokopelli Room

1700 Industry Day Adjourns

## **TUESDAY, 1 AUGUST**

0700 Registration Desk Opens  
Exhibits Set-Up in Yucatan Room  
Continental Breakfast

### **0800 Morning Tutorials**

#### **Tutorial I - Coronado Room**

Introduction to High Energy Laser Systems  
Denny Boesen, Northrop Grumman Information Technology

#### **Tutorial II - Tampico Room**

Introduction to High Power Microwave Systems (FOUO)  
Robert Hutchins and Robert Antinone, Northrop Grumman Mission Systems

1200 Lunch (on own)

### **1300 Afternoon Tutorials**

#### **Tutorial III - Coronado Room**

Military Utility Analysis for DE Systems(FOUO)  
Linda Lamberson, Air Force Research Laboratory/DED

#### **Tutorial IV - Cozumel Room**

Test and Evaluation of High Energy Laser Systems (FOUO)  
Larry McKee, Science Applications International Corporation

#### **Tutorial V - Tampico Room**

Test and Evaluation of High Power Microwave Systems (FOUO)  
Jeff Schleher, Science Applications International Corporation

## **WEDNESDAY, 2 AUGUST**

0630 Registration Desk Opens

0700 Exhibits Open in Yucatan Room  
Continental Breakfast

### **0800 Plenary Session - Cancun Room**

0800 Welcome and Introductions  
Conference Co-Chairs: Patrick Cannon, ITEA -and- Rick Graber, DEPS

0815 Directed Energy Weapons – Will Our T&E Infrastructure Be Ready?  
John Foulkes, Director, Test Resource Management Center

0900 Michael Schexnayder, Deputy to the Commander for Research, Development and Acquisition, USASMDC

0945 Break

1015 Directed Energy Technology Test and Evaluation Support  
Kirk Kloeppel, Deputy Director, Air Force Research Laboratory/DE

1100 The Case for Directed Energy Weapons  
J. Douglas Beason, Associate Laboratory Director for Threat Reduction, Los Alamos National Laboratory

1145 Lunch - Outdoor Pavilion

### **1300 Breakout Sessions**

#### **Session 1: DE Effects/Bioeffects (Unclassified & FOUO)**

Location: Tampico Room

Chair: Stephanie Miller, Air Force Research Laboratory/HED

Two-Band Infrared Thermographer for Standoff Temperature Measurements (FOUO)  
Julia Rentz Dupuis, OPTRA, Inc.

The Role of Ray Trace Modeling as a Tool for Test and Evaluation (FOUO)  
Kalyn Yaws, Air Force Research Laboratory/HED

T&E in Support of Directed Energy Weaponing  
Linda Lamberson, Air Force Research Laboratory/DETA

Thermo-Mechanical Analysis of Ground-Based Directed Laser Energy Weapons on Satellites  
Georgios Mantzouris, Naval Postgraduate School

Application of the Radio Frequency Safety Standard to Directed Energy Weapons  
Noel Montgomery, Air Force Research Laboratory/HED

Bioeffects of Non-lethal Technologies -State of the Science and a Roadmap Ahead  
Jimmy Fleming, Air Force Research Laboratory/HED

**Session 2: Foreign Technology T&E (Unclassified)**

Location: Kokopeli Room

Chair: Kelly McDonald, NAVAIR

The Optical Limiting of Vanadium Oxide Thin Films Under Radiation of Near-IR  
Laser Beams

Sun Chengwei, Institute of Fluid Physics, China Academy of Engineering Physics

Calculation for Characteristics of UWB Pulse Propagation in Building Using Fourth Order  
PSTD Algorithm

Ma Hongge, Institute of Applied Electronics, China Academy of Engineering Physics

Thermal Distortion of Optical Mirrors and Window Induced by High-Power Annular  
Laser Beams

Wang Weiping, Institute of Fluid Physics, China Academy of Engineering Physics

Dominique Serafin, Centre d'études de Gramat, France

Andreas von Mirbach, Diehl BGT Defence GmbH & Co. KG, Germany

**Session 3: Modeling and Simulation (Unclassified & FOUO)**

Location: Cancun Room

Chair: Pat Cannon, AEGIS Technologies

Advanced BRDF Modeling (FOUO)

Edwin Pease, Tau Technologies

Laser Range Safety Tool for Target Reflection Hazard Analysis (FOUO)

Ken Keppler, Northrop Grumman

Verification, Validation, and Accreditation of the Laser Range Safety Tool (FOUO)

Craig Kief, AEGIS Technologies

Laser Irradiance Test and Evaluation Tool (FOUO)

Eric Schafer, Science Applications International Corporation

Dynamic Data Fusion

Aaron Birenboim, Tau Technologies

**1730 Reception**

Heavy Hors d'Oeuvres and a Cash Bar in the Exhibit Area

## **THURSDAY, AUGUST 3**

0630 Registration Desk Opens

0700 Exhibits Open in Yucatan Room  
Continental Breakfast

### **0800 Plenary Panels - Cancun Room**

Welcome and Introductions

Conference Co-Chairs: Patrick Cannon, ITEA -and- Rick Graber, DEPS

### **0815 Plenary Panel A:**

T&E of Revolutionary Systems - Lessons Learned (Unclassified)

Chair: Marion Williams, Institute for Defense Analyses

Panel: Richard Dunn, Northrop Grumman Analysis Center

Fred Green, MacAulay-Brown, Inc

Charles (Pete) Adolph, Consultant

0945 Break

### **1015 Plenary Panel B:**

Ensuring DE T&E Success: Legal, Treaty, Policy and Public Affairs Issues (Unclassified)

Chair: David Karcher, USMC, ADS ACTD Executive Agent

Panel: Joe Rutigliano, Directed Energy Operational Law

Sarah Fullwood, ADS ACTD Public Affairs Officer

Roxanne Constable, Human Effects Center of Excellence, AFRL

1145 Lunch - Outdoor Pavilion

1245 Buses Depart for Classified Sessions (Breakout Session 5)

### **1300 Breakout Sessions**

#### **Session 4: Directed Energy Test Science and Technology Efforts (Unclassified & FOUO)**

Location: Tampico Room

Chair: Minh Vuong, PEO STRI

2-D Hyperspectral Imager High Energy Laser Diagnostics Sensor (FOUO)

L. John Otten, Photon Research Associates

Test & Evaluation Adaptive Optics System Design (FOUO)

Mark Galpin, WSMR

Multiple Waveband Temperature Sensor (FOUO)  
Sumith Bandara, Jet Propulsion Laboratory

Dielectric Electromagnetic Field Probes  
Richard Forber, IPITEK

Dielectric Antenna Electro-Optical Sensor  
Bijan Houshmand, UCLA

A Holographic Target Board for Ground Target Irradiance/Fluence Measurement  
David Roberts, Georgia Tech Research Institute

**Session 5: DE Threat Update (SECRET/US Only)**  
Offsite Location

Radio-Frequency Weapon CONOPS

Naval Laser Weapons

Commercial RF Weapon Assessment Program (Terrorist HPM Assessment Program)

Foreign Nuclear EMP Simulators

Narrowband and Ultra-Wideband Microwave Effect Results on the Tactical Automated Security System

Electromagnetic Environmental Effects (E3) and HPM

**Session 6: Delivering DE Technology (Unclassified & FOUO)**  
Location: Cancun Room  
Chair: Dennis Fairchild, USASMDC Technical Center

Ultra Wide Band High Power Microwave Effects Testing with Multiple Sources (FOUO)  
Paul Hayes, The CEMTACH Group

Conducting Directed Energy Related Testing - T&E Range Challenges  
Dick Dickson, Tybrin Corporation

Ground Target Irradiance Measurement Capability Program  
Mike Bertin, DETEC

BRDF, Survivability and Reflectance Tests for the HEL-Ground Target Irradiance Measurement Program  
Kevin Walter, SARA Inc

Funding Directed Energy T&E Improvements and Modernization with Small Business  
Innovation Research Grants  
Brian Mork, Air Force Flight Test Center

Analysis of Thermal Effects Associated with High Energy Radiation for Reducing  
Scintillation of a Coaxial Beam  
Ronald Phillips, University of Central Florida

**1700** **Conference Adjourns**