# 22nd Annual National Test & Evaluation Conference

"Improving the Test and Evaluation of Defense and Homeland Security Systems Through Effective Development and Intelligent Application of Modeling and Simulation."

> March 6-9, 2006 Hyatt Regency Jacksonville Jacksonville, FL

> > Event #6910

Sponsored by: National Defense Industrial Association Test & Evaluation Division in Cooperation with the NDIA Procurement Division and NDIA Systems Engineering Division

**On-Site Conference Program** 

#### Personal Note to Conference Participants from the T&E Executive Committee:

Thank you for attending our conference in Jacksonville. We appreciate your making this meeting a priority and for you're taking the time to travel to be with us. Whether you're a speaker, exhibitor or simply a delegate, we hope that you'll feel welcomed and that you'll fully participate in all of the activities planned. If you come with friends or family, there are a couple of events scheduled which they are also welcome to attend at a additional nominal fee.

The topic the Executive Committee has selected for this 22<sup>nd</sup> Annual National T&E Conference is very timely and is one that requires answers and action. As always, we have scheduled an outstanding roster of nationally known speakers, including those drawn from industry, military, civil service and academia who will be addressing our theme issues from various directions.

The tutorials scheduled for Monday are offered at no additional charge to those who are registered for this conference. We encourage you to avail yourself of this additional opportunity to learn in more depth about a number of T&E initiatives.

Also, we are again going to recognize those who are worthy of commendation for their achievements in the world of test and evaluation. Plan to join us for both award events, the first on Tuesday evening and the second on Wednesday noon.

We hope that you'll also spend time in the display area becoming aware of what the T&E marketplace has to offer in the way of products, services and programs.

Jacksonville, FL is a beautiful city. Stop by the NDIA registration desk for information on what Jacksonville has to offer.

#### Jim O'Bryon, Chairman, NDIA T&E Division

#### NDIA TEST AND EVALUATION DIVISION

The Test and Evaluation Division was initially established under the auspices of the American Defense Preparedness Association (ADPA). With the merger of National Security Industrial Association and the American Defense Preparedness Association on March 1, 1997, the T&E Division and its responsibilities were transferred to the National Defense Industrial Association. It is one of 30 divisions of the NDIA.

#### NDIA TEST AND EVALUATION DIVISION OBJECTIVES

NDIA's principal missions are to improve weapons technology, improve defense management, and maintain a strong science-industry-defense team continually responsive to all needs of the research, development, test and evaluation, production, logistics and management phase of national preparedness. It provides a forum for the exchange of ideas and information between its members and government agencies through a network of divisions, chapters, national and local meetings, and conferences and visits to Department of Defense installations. Consistent with, and in furtherance of, the By-Laws and policies of the NDIA, the objectives of the T&E Division with respect to those government elements appropriate to its field of interest shall be:

Ensure the continuation, responsiveness, and where necessary, the revitalization of the industrial base to support our national security by:

- Maintaining effective liaison with the Department of Defense, Executive and Legislative Branches of the Government, and other governmental departments and agencies to apprise appropriate representatives of these organizations of T&E Division activities and keep abreast of current and future developments.
- Reviewing, evaluating, and providing recommendations with regard to government policies, practices, directives, and specifications including pending legislation concerning life cycle logistic support, supply chain integration, strategic and tactical mobility, and business processes.
- Serving as a catalyst for community dialogue among T&E communities within government, industry and academia as well as provide an overarching means for dynamic interchanges of information with other functional areas.
- Sponsoring government/industry meetings, seminars, and symposia to provide effective communications between government and industry relative to management activities for which the T&E Division is responsible under this matter.
- Maintaining viable liaison with other divisions of the NDIA, other associations, and national level industry coalitions for the purpose of exchanging information of mutual interest and coordinating and cooperating on activities requiring Joint participation.
- Developing strategic directions effecting T&E partnerships between national security industries and government and to formulate proposals for national policies, addressing their impact on the national security industrial base.
- Establishing and maintaining a productive proactive dialogue with the national news media.
- Fostering learning of the basics and advanced concepts and techniques of T&E within the defense industry including the cross pollination of commercial approaches to T&E for the defense community.
- Commemorating and recognizing services rendered by individuals, companies, and government agencies in meritorious acts related to activities enumerated above.

#### The Walter W. Hollis Award

The Walter W. Hollis Award is presented annually in recognition of lifetime contributions and achievement in the area of defense Test and Evaluation. The Award is presented in the name of Walter W. Hollis who is recognized for his dedicated and long-standing service in the field of Test & Evaluation.

Previous	Recipients

- **2005** Hon Thomas Christie, DOT&E, OSD
- **2004** Dr. Marion L. Williams, Headquarters AFOTEC
- **2003** Mr. James W. Fasig, Aberdeen Test Center
- 2002 Mr. G. Thomas Castino, Underwriters Laboratories, Inc.
- 2001 Hon Philip E. Coyle III, DOT&E, OSD
- 2000 Mr. Walter W. Hollis, Department of the Army



"The Department of Defense finds this event meets the minimum regulatory standards for attendance by DoD employees. This finding does not constitute a blanket approval or endorsement for attendance. Individual DoD component commands or organizations are responsible for approving attendance of its DoD employees based on mission requirements and DoD regulations."

### AGENDA

#### MONDAY, MARCH 6, 2006

- 7:00 AM 5:00 PM Conference Registration
- 11:00 AM 5:00 PM Displays Set-Up

1:00 PM - 4:45 PM Tutorials (These tutorials are offered at no extra cost to all registrants)

TRACK I	1:00 PM – 2:45 PM		3:00 PM – 4:45 PM
	"How to Improve the Effectiveness, Efficiency, & Integration of Test & Evaluation (T&E) & Modeling & Simulation (M&S)," Dr. Mark Kiemele, Air Academy Associates (PART 1)		"How to Improve the Effectiveness, Efficiency, & Integration of Test & Evaluation (T&E) & Modeling & Simulation (M&S)," <i>Dr. Mark Kiemele, Air Academy</i> <i>Associates (PART 2)</i>
TRACK II	"Putting the Missions and Means Framework (MMF) to Work to Drive Analysis - Getting to the "So What" by Asking the Right Questions about the Mission and Generating Complete and Relevant Answers. A Practical Tutorial on MMF Application," LTC Britt Bray, USA (Ret), Dynamics Research Corporation, Inc.; Mr. Bill Yeakel, President, ORSA Corporation (PART 1)	Break	"Putting the Missions and Means Framework (MMF) to Work to Drive Analysis - Getting to the "So What" by Asking the Right Questions about the Mission and Generating Complete and Relevant Answers. A Practical Tutorial on MMF Application," LTC Britt Bray, USA (Ret), Dynamics Research Corporation, Inc.; Mr. Bill Yeakel, President, ORSA Corporation (PART 2)

4:45 PM Tutorial Sessions Close

5:00 PM Conference Registration Closes (Registration will re-open tomorrow at 7:00 AM.)

There is no scheduled function this evening. Please stop by the registration desk for a listing of local dining options, entertainment, shopping, etc.

Your attention please: Survey sheets will be given to every conference registrant upon arrival. The survey sheets are intended to gather your thoughts and ideas regarding this NDIA T&E Conference. Registrants are requested to thoughtfully complete these surveys and return them to the NDIA desk prior to their departure. The results of these surveys will be used to serve as a basis in planning for future conferences and should be completed.



Jacksonville Skyline

	TUESDAY, MARCH 7, 2006
7:00 AM	Registration Opens
7:00 AM	Continental Breakfast in Display Area
8:00 AM	Call to Order, Mr. Sam Campagna, NDIA
8:05 AM	Presentation of the Colors and National Anthem
8:10 AM	Welcome and Opening Comments, Mr. James O'Bryon, Chairman NDIA Test and Evaluation Division
8:15 AM	Conference Keynote Address, Gen Larry Welch, USAF (Ret), former President, IDA & former Chief of Staff, USAF
8:55 AM	"M&S and Testing: Collision Course or Happy Marriage?, " Hon Philip E. Coyle, III, former Director, Operational Test & Evaluation (DOT&E), OSD
	Session #1 PRESENTATION OF THE ISSUES Host: Mr. Larry Graviss, Chairman, NDIA ICOTE Committee, Jacobs Sverdrup
9:30 AM	ICOTE Editorial Report: "Assessment of Large-Scale Distributed Engineering M&S Plants," Mr. Jim Sandberg, Northrop Grumman; Mr. Michael Crisp, ODOT&E
10:15 AM	Break in Display Area
10:45 AM	Panel "Addressing Non Technical Obstacles to Effective M&S Connectivity in Support of T&E" Panel Chair: Mr. John Illgen, Northop Grumman Panelists: Mr. Rick Cozby, DTC Mr. Jack Sheehan, FCSCTO Mr. Augustine Ponturiero Mr. Peter Shaw Dr. Paul H. Deitz, ARL
12:15 PM	Luncheon
	Session #2 Host: Mr. Dick Dickson, Tybrin Corporation
1:15 PM	Panel "DT&E's Perspectives on Making M&S and T&E Better Partners" Panel Chair: Col Richard Stuckey, USAF, Acting Deputy Director, DT&E, OUSD(AT&L) Panelists (Government Representatives): Dr. George Kai'liwai, Technical Advisor, AFFTC Edwards AFB, CA Mr. Thomas Berard, Director, WSMR Panelists (Industry Representatives): Mr. Steven Cameron, Lockheed Martin Mr. James A. Hazlett, Raytheon

2:45 PM

Break in Display Area

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#### TUESDAY, MARCH 7, 2006 (Continued)

#### Session #3 Host: Dr. Juan Vitali, ATEC

3:15 PM	"DOT&E Perspectives," Mr. David Duma, Acting Director, Director Operational Test & Evaluation
3:45 PM	"An LFT&E Perspective on Making M&S and T&E Better Partners," Dr. Lowell Tonnessen, IDA
4:15 PM	"Modeling the FCS Brigade Combat Team in a Stability and Reconstruction Operations Mission Implications for T&E Planning," <i>LTC Britt Bray, USA (Ret), Dynamics Research Corporation</i>
4:45 PM	"Transformation In TD&E," Mr. Bill Yeakel, President, ORSA Corporation
5:15 PM	Afternoon Session Closes
6:00 PM	Reception
6:30 PM	Honors Banquet- The cost of the banquet is included in the conference registron fee. Guests (non- conference registrants) are also welcome to attend this banquet for an additional fee. Reservations must made at the NDIA registration desk by Monday, March 6, 2006 at 5:00 PM.

#### **Guest of Honor**

This event has historically been a highlight of our National NDIA T&E Division Annual Conference and this year is no exception. Our 2006 recipient of the Walter Hollis Award for Lifetime Achievement in Test and Evaluation is RADM Charles "Bert" Johnston, USN, (Ret).



RADM Bert Johnston's T&E involvement extends more than 30 years including time with the US Navy as a Test Pilot, Program Manager, Systems Engineer, and a host of other positions in the U.S. and abroad. He has served with distinction in senior testing positions in Australia, Pax River, China Lake and more recently as Commander, Naval Weapons Center, Weapons Division, China Lake, CA.

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In January 2002 he became Vice Commander for the Naval Air Systems Command. He continued to stay involved in testing, supporting the integration of joint capabilities and the expanded use of test facilities for rehearsal, demonstration, training, and experimentation. His transition from the Navy in the Spring of 2005 wasn't the end

of his involvement with testing. He now serves as Vice President and General Manager for the Systems Engineering Division of Wyle Laboratories, Naval Aviation's largest support contractor. Among his responsibilities are Wyle's Flight Test Operation and the Telemetry Data Systems. Congratulations from all of us for a job done well!!

#### **Guest Speaker**



VADM Bennitt (Ret), USN has flown over 4000 hours in more than fifty different aircraft types and models. He graduated from the U.S Naval Academy in 1964 and was designated a Naval Aviator eighteen months later. After two combat cruises and 222 combat missions with Attack Squadron 94, flying the A-4 Skyhawk aboard USS HANCOCK and USS BONNE HOMME RICHARD, he attended the U.S. Naval Test Pilot School and served as an Aircraft Carrier Suitability Test Pilot at the Naval Air Test Center. This assignment was followed by a tour as a flight test tutor at the Empire Test Pilot School at Boscombe Down, England, during which he was commended by the Queen of England for valuable service in the air as the school's Stall/Spin Program Manager and as one of the development test pilots on England's first variable stability training aircraft.

Vice Admiral Bennitt was later assigned to Washington, DC where he served as Acting Director of Aircraft Carrier and Air Station Programs in the office of the Chief of Naval Operations. He then received orders as Commanding Officer, USS NIMITZ, taking command on August 28, 1987. In September 1989, Vice Admiral Bennitt was assigned as Deputy Director, Test and Evaluation and Technology Requirements (OP-091B) in the office of the Chief of Naval Operations. In November 1991, he returned to the fleet to take command of Carrier Group FIVE and Battle Force Seventh Fleet, home-ported in Yokosuka, Japan. In October 1993, Vice Admiral Bennitt was assigned as Director, Air Warfare Division in the office of the Chief of Naval Operations. He then assumed command as Commander, Naval Air Force, U.S. Pacific Fleet in January 1996. For his contributions to flight safety during that tour the International Flight Safety Foundation selected him as the 1998 recipient of the Laura Taber Barbour International Air Safety Award.

Mr. Bennitt is now Executive Vice President and General Manager of the Wyle Aerospace Group. He also serves as a National Director of the Navy League of the United States.

Plan to attend our banquet and enjoy the evening and pay tribute to this year's honoree.

	WEDNESDAY, MARCH 8, 200	6			
7:00 AM	00 AM Registration Opens				
7:00 AM	Continental Breakfast in Display Area				
8:00 AM	Call to Order and Administrative Announcements, Mr. Sar	n Campagna, NDIA			
8:00 AM	Focus on our Customers (Video)				
	Session #4 LOOKING AT THE FACTS Host: Mr. Bill Yeakel, ORSA Corpora	tion			
8:15 AM	DMSO PANEL "The Challenge of Using M&S in T&E" Panel Chair: COL Jerry Glasow, USA, Director, DMSO Panelists: Mr. Michael Crisp, ODOT&E Mr. Chris Poust, TRMC, OSD TBD, ATEC Mr. Jerry Kitchen, AFOTEC Mr. Steven Whitehead, OPTEVFOR				
9:45 AM	Break in Display Area				
	Session #5 MILITARY SERVICE PERSPECTIVES Host: Dr. Ernest Seglie, DOT&E	\$			
10:15 AM	"Perspective from the Army," Mr. Walter Hollis, DUSA/OR				
10:45 AM	"Perspective from the Navy," RADM Bill McCarthy, USN, (	COMOPTEVFOR			
11:15 AM	"Perspective from the Air Force," Mr. Jack Manclark, AF/	Test & Evaluation Directorate			
11:45 AM Annual Awards Luncheon <b>The Tester of the Year Awards</b> are presented annually to civilian and military personnel supporting all of the military services and OSD. For each military service and OSD, an award is presented to the outstanding defense civilian, outstanding military, and outstanding supporting contractor.					
Award Winners Military MAJ Sandy Vann, USA MAJ Victoria Miralda, USA Maj James Colebank, USA CDR Chris Holmes, USN		<b>Contractors</b> Mr. Freddie Lee, Army Contractor Mr. Steven Seiden, OSD Contractor Ms. Katherine Hallett, USAF Contractor Mr. Rollin Sublett, Navy Contractor			

LtCol Christopher Seymour, USMC Mr. Bruce Leaman, Marine Corps Civilian

- Mr. Rollin Sublett, Navy Contractor
- Mr. Gary Evans, Marine Corps Contractor

Session #6 M&S STUDIES IN THE CONTEXT OF T&E AND ACQUISITION Host: Dr. Lowell Tonnessen, IDA				
1:15 PM	"Diagnosis of the Problem: What Prior Studies Have to Say," Dr. James E. Coolahan, APL, JHU			
1:45 PM	"The Joint M&S Study", Dr. Frank Gray, AFOTEC			
2:15 PM	"Open Air Testing vs. Modeling and Simulation: At Last Peaceful Coexistence?," RADM Charles "Bert" Johnston, USN (Ret), Vice President & General Manager, Wyle Laboratories			
2:45 PM	Break in Display Area			
	Session #7 Host: Mr. John Illgen, Northrop Grumman			
3:15 PM	"NDIA Industry Perspectives," Lt Gen Larry Farrell Jr., USAF (Ret), President & CEO, NDIA			
3:45 PM	"Open Technology Development & Testing," Mr. John Scott, Selection Pressure, LLC			
4:15 PM	"Modeling and Simulation of Systems," Mr. Vincent M. Ortiz, AVW Technologies			
4:45 PM	"M&S / T&E Event – Working Together: AUV Fest 2005 ISR Scenario," Mr. Reid Johnson, NUWC, Keyport			
5:15 PM	Afternoon Session Closes			
6:00 PM - 9:00 PM	Paddle Boat Reception You are invited to join us for a reception wtih cocktails, heavy hors d'oeuvres, and a carving station aboard the <i>Lady St. Johns</i> hosted by NDIA and AVW Technologies. Only \$25 per person. Guests are welcome to attend. Boarding time 6:00 PM - 6:30 PM at the Hyatt Regency Jacksonville dock located behind the hotel.			

AVW Technologies, Inc. Innovative Solutions to the Challenges of the Future



AVW Technologies, Inc. is a small, veteran-owned business that provides Professional Engineering Services, Test and Evaluation Support, and Shipbuilding Engineering Management Consulting. Our efforts to date have primarily been focused on surface ship acquisition, from Design through Production and Test and Lifecycle Management. AVW is also a recognized leader in the use of Integrated Product Data Environments and Digital Product Models to support Ship Acquisition, as well as the use of Modeling and Simulation technologies to support Design, Production, and Test and Evaluation.

At AVW Technologies, our team of former Naval Professionals is skilled in Acquisition, Engineering and T&E Management, and Naval Warfare. Our staff includes many former Operational Test Directors, Operational Test Coordinators, and military analysts with matrixed military experience across technical/warfare disciplines, including:

- Surface combatants, amphibs, CVN, aviation, E-2, TACAIR, USMC, staffs
- Combat systems, HM&E, suitability, AAW, ASW, MIW, STW/LAW, SUW, C4ISR, IW, AMW/EXW + Seabasing, AT-FP, coastal warfare
- CT/DT/LFT/OT, Systems Engineering, JCIDS/Requirements, IPT Management
- M&S Management

Our company takes pride in hiring only the most qualified personnel and making them available to our customers at reasonable rates. We endeavor to remain current with the Doctrine and Policies of today's revolution in military affairs. We are committed to supporting our clients to our fullest capabilities, and we encourage all our staff to go the extra mile to meet our customers' needs.

We are pleased to have Vincent Ortiz of AVW Technologies presenting several case studies based on our work on the LPD 17 PRA Testbed during the "M&S of Systems of Systems", "VV& A – Does it Work? Can We Make it Work?", and "How Can M&S Optimize Its Use of T&E Data and Vice Versa" sessions. Please stop by our exhibition booth to learn more.

#### THURSDAY, MARCH 9, 2006

7:00 AM	Registration Opens
7:00 AM	Continental Breakfast in Display Area
8:00 AM	Call to Order and Administrative Announcements, Mr. Sam Campagna, NDIA
	Session #8 Host: Dr. Paul H. Deitz, ARL
8:05 AM	"Using the Missions and Means Framework to Generate Cost-Effective Live-Fire Test and Evaluation Strategies" Presenters: Dr. Martha K. Nelson, Franklin & Marshall College & Dennis C. Bely, US Army Research Laboratory
9:00 AM	"Modeling and Simulation to Advance Test and Evaluation," Dr. Sheldon Tieszen & Dr. Lou Gritzo, Sandia National Laboratories
10:00 AM	Break in Display Area
10:45 AM	Begin Parallel Tracks

TRACK I	T&E / M&S Architecture			
	10:45 AM 11:15 AM			
	"Test and Training Architecture, TENA, Offers Range Interoperability and Resource Reuse Solutions for DoD Test and Training Ranges," <i>Mr. Gene Hudgins, BAE Systems</i>	"LPD 17 PRA Testbed: A Case Study of T&E Data Supporting Architecture," Mr. Vincent M. Ortiz, AVW Technologies		

TRACK II	(VVA) "V,V&A" Issues to Make T&E/M&S Work Effectively			
	10:45 AM 11:15 AM			
		"Modeling and Testing of Civilian GPS Systems and Potential Vulnerabilities," <i>2Lt</i> <i>Shawn Littleton, USAF, Holloman AFB</i>		

12:00 PM

Lunch



#### THURSDAY, MARCH 9, 2006 (Continued)

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Parallel Tracks Continued

TRACK I	Policy Proposals					
	1:00 PM	2:00 PM				
	"27 Steps to Success: The DoD Acquisition M&S Master Plan," Mr. Fred Myers, OUSD(AT&L)/DS/SE	"No More Second Opinions: Oganizing DoD M&S within the Acquisition Cycle, Mr. James O'Bryon, The O'Bryon Group	"Optimizing Cost and Time Effectiveness of Test and Evaluation Using Knowledge-Based Simulations," Dr. Keith Bradley, LLNL			

TRACK II	Examples of Attempts to Get Mutual Support between T&E and M&S				
	1:00 PM	1:20 PM	1:40 PM	2:00 PM	
	"Intelligent Munitions System: Balancing T&E and M&S," <i>Mr. William J.</i> Bush, ARDEC, Picatinny Arsenal	"Integration of Transport Modeling with Test and Valuation in CBR Building Protection Systems," <i>Mr.</i> <i>James Risser, Battelle</i>	"InterTEC: Testing Joint Mission Threats in a TENA Based Environment," <i>Mr. Robert</i> <i>Heilman, Pt. Mugu, CA</i>	"Dual Thrust Modified Smokey SAMS For Low Cost Testing and Simulation of Aircraft Missile Warning and Laser IRCM Systems," <i>Mr. William R. Taylor,</i> (WPAFB)	



Break in Display Area

#### Session #9 T&E / M&S Infrastructure Issues Mr. Jim O'Bryon, NDIA T&E Division Chair, The O'Bryon Group

3:00 PM	General Session

"CAW (Center for Asymmetric Warfare) Use of M&S in Maritime HLS/HLD/ATFP Test and Training Exercises," Mr. Arman Tchoubineh, NAWC WD, Pt. Mugu, CA

"Knowledge is Power – Joint Datalink Information Combat Execution (JDICE) Joint Test and Evaluation," Mr. Clarence Stone, JDICE JT&E OSD

"Building An Extensable Virtual Sensor Network," Mr. Joshua J. Pressnell, RTI

"Commercial Air Services; Live Test Assets for Electronic Warfare," Mr. Stan Ulkoski, PMA-207D2 Aircraft Operation Manager J.F.Taylor, Inc., NAVAIR support contractor; Ms. Linda Barrett (JFTI)

5:00 PM Conference Synopsis and Closing Remarks, Mr. James O'Bryon

(Reminder: Please submit your completed Conference Survey Sheets)



Arlington, VA 22201 www.ndia.org

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