



# NDIA

## 5TH ANNUAL TESTING & TRAINING SYMPOSIUM & EXHIBITION

NDIA

### The Defense Test & Training Steering Group Plans & Progress

**ASSURING ADEQUATE RESOURCES & FACILITIES  
FOR TEST & TRAINING**

**Mr. Parker Horner  
Chief, Resources  
DOT&E (RR)**





# Test & Training Transformation

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- ***Transformation...!*** – A FRONT BURNER initiative throughout OSD - including USJFCOM, JCS, and Services
  - DPG/QDR
  - FY-04 POM
- Big test and training implications
  - Will require live and synthetic exercises for test, experimentation, and training
- Linking ranges will be a primary option to satisfying emerging test & training strategies



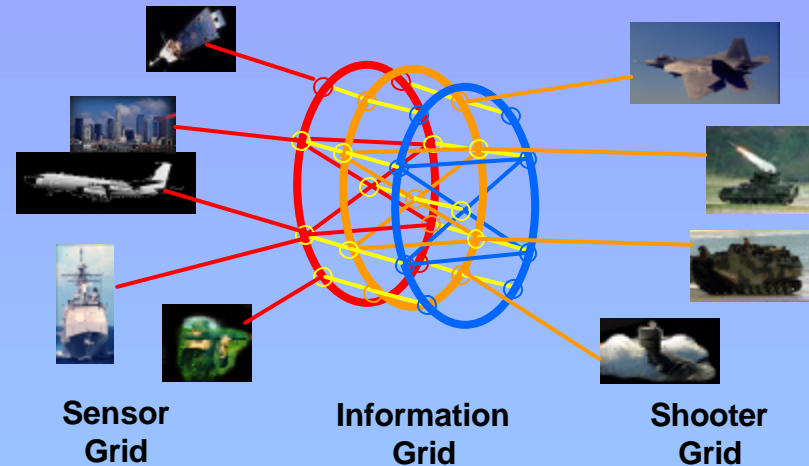
# Why Test & Training Transforming

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## Network Centric Warfare

- Test & training for Network Centric Warfare (NCW) requires:

- Networked ranges
- Live/simulated fused sensor-shooter inputs
- Simulation-supported communication networks
- Command & Control integrated with force training



- Drivers:

- Robust interoperability testing capabilities needed
- New requirements for joint and interoperability training of JTF units
- Urban Operations require new infrastructure
  - Larger Scale
  - Diversified
  - Combined Arms Capable
  - Pervasive, basic through advanced



# Transformation Resource & Facility Topics

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- T&E Modernization Planning
- Interoperability Test Bed
- JDEP in support of T&T needs
- Training Transformation... JNTC
- Embedded Instrumentation for Testing & Training
- Cooperative Budget Initiative
- Range Sustainability
- JTTRR
- Testing & Training for Homeland Defense

**Hot Topics  
To be  
Discussed**



# T&E Modernization

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- Ensure test and evaluation practices support rapid development and fielding of new weapon systems
  - Ensure test policies, procedures and their implementation satisfactorily address all acquisition processes including evolutionary acquisition.
  - Modernize the Department's test infrastructure so that it is capable of supporting affordable, adequate testing while leveraging investments in joint training ranges.



# T&E Modernization Congressional Approach

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- Current SASC Language would:
  - Establish a Test and Evaluation Resource Enterprise under the DOT&E to “manage all funds available to the Department of Defense for the support of investment in, operation and maintenance of, development of, and management of the test and evaluation facilities and resources of the Major Range and Test Facility Base.”
  - Transfer substantial FY2003 program funding to the Enterprise to increase institutional funding such that the User pays only direct costs of testing
  - Increases CTEIP funding
  - Establish a single financial management and accounting system for all T&E facilities
- Services are opposed to this language



# Interoperability Testbed Attributes

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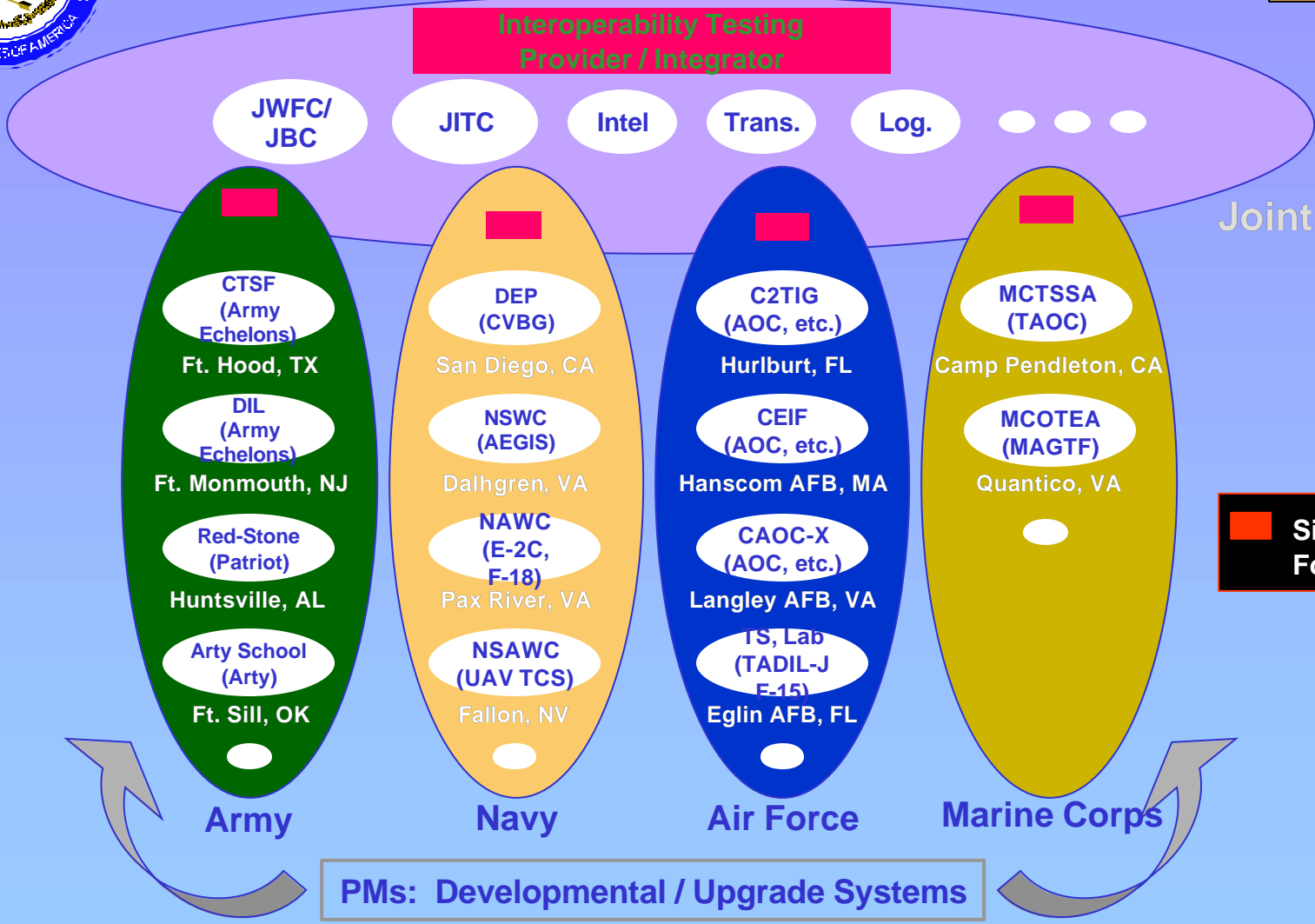
- Flexible infrastructure
  - Interoperable set of government and contractor nodes
  - HWIL/SWIL systems and applications
  - Common environment simulators/stimulators
  - Assured inter-facility connectivity (wideband, fixed-location network, tactical)
  - Mix of simulation and real-world systems
  - Cadre of technical support
- Customer friendly
  - Customized for different users and mission areas
  - Joint contribution
  - Easy to arrange for services/support

**Provide incentives for user participation**



# Proposed Family-of-Systems Interoperability Testbed

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Joint

Single Service Focal Points

DOT&E advocacy for intra- and inter-Service interoperability testing





# Joint Distributed Engineering Plant (JDEP)

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- DOD / Service-funded initiative to support Test & Training needs in knowledge-centric warfare
  - Based on JTF interoperable system capabilities.
- Will facilitate replication of joint operational environments through the use of existing distributed instrumentation capabilities across DOD and industry
  - Creating a true DOD enterprise infrastructure to support developers, testers, and warfighters in addressing mission area interoperability issues.

“JDEP is designed to improve the interoperability of weapon systems and platforms through rigorous testing and evaluation in a replicated battlefield environment.”

DPG Update FY 2002-2007, Guidance, p.112



# JDEP POM FY04 - 09 Approach

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- Meet needs of Developers, Testers, and Warfighters for an integrated, System-of-Systems environment
- Centrally fund a network to interconnect existing Service and Agency capabilities (systems, labs, etc)
- Centrally fund common, reusable, standards-based tools and equipment (gateways, scenarios, data collection and analysis software, leveraging FI 2010 / TENA, etc)
- Provide funding to Services to conduct SoS events
- Provide support for event planning and conduct for user events as prioritized by JDEP Board of Directors



# Training Transformation

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- USD (P&R), CJCS, Services, make recommendations for developing a Joint and interoperable training capability that includes an effective mix of simulated and live operations. Address:
  - The need for a Joint National Training Center (JNTC)
    - Level of training to be accomplished
    - Live training against an adaptive adversary represented by a dedicated Joint opposing force
    - Opportunities for building on existing capabilities at Service training centers and ranges
    - (Expanded to include Test ranges)
- Address issues in the FY 04-09 program. Include recommendations on the balance between Service and Joint training requirements.



# Converging Instrumentation Needs

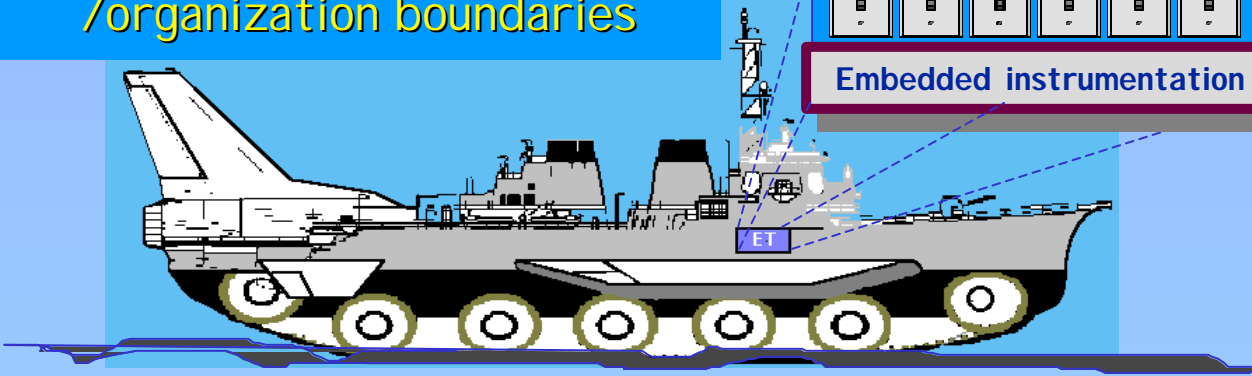
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Embedded instrumentation crosses many mission /organization boundaries



**EnRAP**  
Currently under discussion for mutual test & training development





# Cooperative Budget Initiative

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- POM Programs with overlapping equities:
  - T&E Modernization
  - Interoperability Test Bed
  - JDEP
  - JNTC
- Series of meetings to avoid creating POM 04 stovepipes and coordinate / leverage commonalities



# Homeland Defense

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- Within DoD... DOT&E lead for related Homeland Defense test requirements
  - Requirements not fully defined
  - Need to assess technological & functional capabilities with respect to new, emerging asymmetric threats

## Technologies

- Border Security
- Transportation Security
- Emergency Response
- Chem/Bio detection & response
- Critical infrastructure protection
- Information technology

## Functional Expertise

- Communications, Command & Control
- Sensors
- Physical security
- Cyber security
- Protective materials
- Data management
- Contracting

- Anticipate this area becoming a rapidly growing concern!!



# JTTRR - Common Approach to Instrumentation Investment

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- Reflect the 15 Year Instrumentation Investment Plans for T&T Range Development
  - Modernize to Common Instrumentation Systems as Appropriate
  - Strengthen Common Test and Training Threads
  - Compatible Test and Training Foundation (Interoperable, Reusable, Sharable)
  - Integrate Live and Virtual Test and Training Instrumentation Systems where sensible
  - Provide flexible approach that can adapt to the management style of each Service/community
  - Address other T&T partnering concerns
    - Range Cooperatives, Common Architectures





# JTTRR Roadmaps\* Updated Fall 2001

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## • TSPI

- Air
- Ground
- Sea

## • Targets

- Rotary Wing
- Seaborne
- On-Board Scoring
- Supersonic
- Full Scale Aerial (Fixed Wing)
- Subscale Subsonic
- Target Control
- Aerial Tow
- Anti-Radiation Missile
- Mobile Ground

**\*Note:**  
Policy is to  
review and update  
roadmaps biennially!





# The JTTRR's Future

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- Continued Roadmap Development
  - Added Categories/Domains
- Linkage to Test Resource Master Plan (TRMP)
  - Potential use of common database and single data call (T&E)
  - Merging JTTRR and T&E Investment Cycle Schedules
- Linkage to Strategic Planning Activity





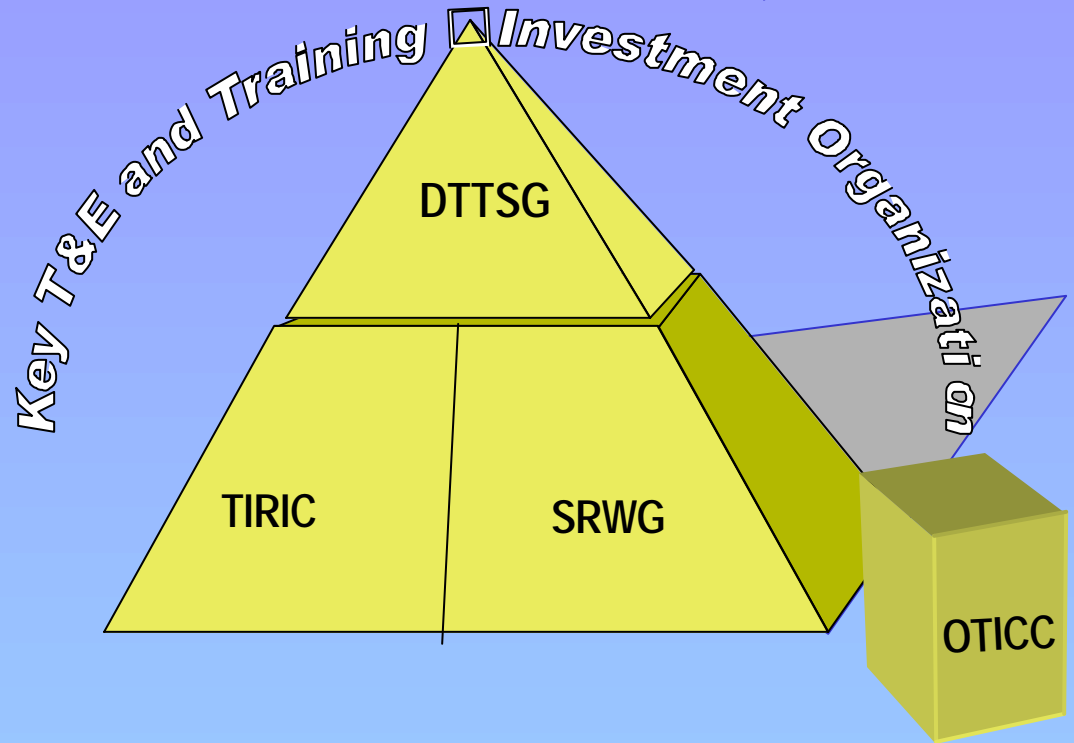
# A Forum for Addressing These Issues

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**DTTSG**

DOT&E, Chair  
Members  
ASD, C I  
DDRE  
DUSD (Readiness)  
PDUSD (A&T), Strategic and Tactical Systems  
Army Training Representative  
Army T&E Representative  
Navy Training Representative  
Navy T&E Representative  
Air Force Training Representative  
Air Force T&E Representative  
Marine Corps Training Representative  
Marine Corps T&E Representative  
Joint Staff (J-8) Director, Force Structure, Resources, & Assessments  
Defense Threat Reduction Agency  
Defense Intelligence Agency  
Ballistic Missile Defense Organization  
Advisors as Required

*Flag / SES level representation*



- A senior level focal point for range issues
  - "Change agent" at heart of test-and-training cooperation dialogue
  - Examines critical test & training range issues, including instrumentation, encroachment, management (funding), and interoperability, provide policy guidance.



# In Summary

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## In the spirit of *Transformation* -

- Service Secretaries, CJCS, JTF Combatant Commanders & OSD are upgrading test and training resources and facilities to better enable:
  - Interoperability and information assurance testing
  - Joint Force Operations
- Within OSD Plans are being worked to address:
  - Ensuring ranges and devices are modernized and sustainable
  - Assessing and reporting of Interoperability and Information Assurance
  - Acquisition and logistic procedures are being amended & integrated

**FY 04-09 POM  
a major Departure  
point!!!**



# Points of Contact

NDIA

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DOT&E/Ranges & Resources – Chief, Resources  
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  - Training: Mr. John Walsh  
DUSD(R)RT – Assistant Director for Collective Training  
Chairman, Training Instrumentation Resource Investment  
Committee  
(703) 695-1760
- Support
  - Mr. Lou Husser - (703) 681-4000 Ext 163
  - Mr. Steve Seiden - (703) 681-4000 Ext 158



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**BACKUP**



# Sustainable Ranges

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## Readiness & Range Preservation Initiative

### – Concept

- Endangered Species Act
- Marine Mammal Protection Act
- Migratory Bird Treaty Act
- Clean Air Act
- RCRA and CERCLA
- Additional Provisions

### – Reality

- **Endangered Species Act**
- **Migratory Bird Treaty Act**
- **Marine Mammal Protection Act**
- **Clean Air Act**
- **RCRA and CERCLA**
- **Additional Provisions**

Hope to resolve in Conference  
September 2002

In Conference Expectations

*Possible*

*Doubtful*